

Sprint

NETWORK VISION MMBS LAUNCH

SE74XC225

ATTACHMENT 2 PLANS AND PHOTO SIMULATIONS FOR A MODIFICATION TO ZON00-00022

3000 CARILLON POINT KIRKLAND, WA 98033

KING COUNTY

LATITUDE: 47.657236/ 47° 39' 26.05" (NAD 83) (GOOGLE EARTH) LONGITUDE: -122.206173/ -122° 12' 22.2228" (NAD 83) (GOOGLE EARTH)

ROOFTOP

SEATTLE MARKET

WASHINGTON STATE CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2009 IBC, STANDARDS AND AMENDMENTS-WAC 51-50; 2009 IMC, STANDARDS AND AMENDMENTS-WAC 51-52; 2009 IFC, STANDARDS AND AMENDMENTS-WAC 51-54;
- 2009 IPC, STANDARDS AND AMENDMENTS-WAC 51-56; 51-57

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2009 IBC BUILDING CODE.

CODE BLOCK

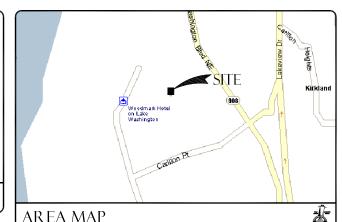
SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS

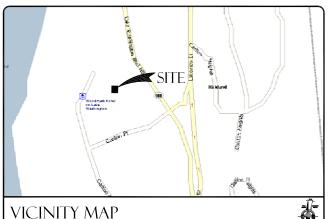
- REMOVE (4) EXISTING PANEL ANTENNAS (2 PER SECTOR) INSTALL (2) NEW PANEL ANTENNAS (1 PER SECTOR) REMOVE (1) RF CABINET INSTALL (1) NEW MMBS CABINET

- INSTALL (1) NEW MBD CABINET
 INSTALL (1) NEW BBU CABINET
 REMOVE ALL EXISTING SPRINT ANTENNA COAXIAL CABLES
 INSTALL (2) NEW HYBRID CABLES USING EXISTING COAX ROUTE (1 PER
- SECTOR)
 INSTALL (2) NEW RRU'S

PROJECT DESCRIPTION

SIGNATURE	<u>DATE</u>
	SIGNATURE





FROM SPRINT OFFICE IN: 1000 124TH AVE SE, BELLEVUE, WA 98005 DEPART 124TH AVE SE, BELLEVUE, WA 98005 ON 124TH AVE SE (NORTH) DEPART 1241H AVE SE, BELLEVUE, WA 98000 ON 124
TURN LEFT (WEST) ONTO 123RD AVE SE
TURN RIGHT TO STAY ON 123RD AVE SE
KEEP STRAIGHT ONTO 123RD AVE (SE) [SE 25TH ST]
BEAR LEFT (NORTH) ONTO 123RD AVE (SE)
ROAD NAME CHANGES TO SE 12TH ST
ROAD NAME CHANGES TO SE 12TH ST
ROAD NAME CHANGES TO 121ST AVE SE TURN LEFT (WEST) ONTO SE 8TH ST TAKE RAMP (RIGHT) ONTO 1-405 AT EXIT 14, TURN RIGHT ONTO RAMP TAKE RAMP (LEFT) ONTO SR-520 TURN RIGHT ONTO RAMP TURN RIGHT (NORTH) ONTO 108TH AVE NE TURN LEFT (WEST) ONTO NE 38TH PL
TURN RIGHT (NORTH) ONTO SR-908 [LAKE WASHINGTON BLVD NE] TURN LEFT (WEST) ONTO CARILLON PT TURN RIGHT (NORTH) ONTO LOCAL ROAD(S) ARRIVE 3000 CARILLON POINT, KIRKLAND, WA 98033 DRIVING DIRECTIONS

<u>SHEET</u>	DESCRIPTION
T-1	TITLE SHEET
N-1	GENERAL NOTES
N-2	GENERAL NOTES
A-1	OVERALL SITE PLAN
A-2	ENLARGED SITE PLAN
A-3	ENLARGED EQUIPMENT PLANS
A-4	ANTENNA PLANS AND SCHEDULES
A-5	NEW SOUTH & EAST ELEVATIONS
A-6	EQUIPMENT DETAILS
A-7	EQUIPMENT DETAILS (INDOOR SPECIFICATIONS)
A-8	EQUIPMENT DETAILS
RF-1	ANTENNA AND CABLE COLOR CODING DETAILS
E-1	ONE-LINE DIAGRAM & POWER PANEL SCHEDULE
E-2	DC POWER ONE-LINE DIAGRAM
E-3	ELECTRICAL DETAILS (INDOOR SPECIFICATIONS)
E-4	CONDUIT ROUTING
E-5	GROUNDING PLAN
E-6	GROUNDING DETAILS
E-7	GROUNDING DETAILS

SHEET INDEX

GENERAL DYNAMICS ON BEHALF OF SPRINT 1000 124TH AVE SE, SUITE # 200 BELLEVUE, WA 98005

CONTACT:

PROPERTY INFORMATION:

PROPERTY OWNER: CARILLON PROPERTIES W BLVD EN0634

ADDRESS: 3240 CARILLON POINT KIRKLAND WA 98033

CONTACT: UNKNOWN

(XXX) XXX-XXXX

TOWER OWNER: SITE ID:

ZONING CLASSIFICATION: PLA 15A

CONSTRUCTION TYPE: VB

OCCUPANCY: JURISDICTION: CITY OF KIRKLAND

CURRENT USE: UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY

NEW USE: UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):

LEASE AREA:

PROJECT SUMMARY

ARCHITECT & ELECTRICAL ENGINEER:

KDC ARCHITECTS.ENGINEERS, P.C 4720 200TH STREET SW, SUITE 200 LYNNWOOD, WA 98036

CONTACT: KEN CAMP

(425) 670-8651 ken.camp@kdcarchitects.com

STRUCTURAL ENGINEER:

CG ENGINEERING CG ENGINEERING
250 4TH AVE SOUTH
EDMONDS, WA, 98020
CONTACT: GREG GUILLEN
PH: (425) 778-8500
EMAIL: UNKNOWN

SITE ACQ. PROJECT MANAGER:

GENERAL DYNAMICS 1000 124TH AVE SE, SUITE # 200 BELLEVUE, WA 98005
CONTACT: DAVID SIMARD (425) 201-3747 david.simard@gdit.com

CONSTRUCTION MANAGER:

GENERAL DYNAMICS 1000 124TH AVE SE, SUITE # 200 BELLEVUE, WA 98005 CONTACT: EDWARD MARQUEZ CONTACT: (425) 736-4991 edward.marquez1@gdit.com

BUILDING DEPARTMENT:

CITY OF KIRKLAND 123 FIFTH AVE
KIRKLAND, WA, 98033
CONTACT: UNKNOW

UNKNOWN (425) 587-3000 UNKNOWN FMAII:

ELECTRICAL COMPANY:

PUGET SOUND ENERGY 10885 NE 4TH STREET BELLEVUE, WA 98004-5591 UNKNOWN (866) 831-5161 UNKNOWN

TELCO COMPANY:

FRONTIER COMMUNICATIONS 3 HIGH RIDGE PARK STAMFORD, CT 06905-1390 CONTACT: UNKNOWN PHONE: (877) 601-1378 frontier@ftr.com FMAIL:

AAV MANAGER:

AAV WASHINGTON/GENERAL DYNAMICS WIRELESS SERVICES

1000 124TH AVE NE, SUITE #200 BELLEVUE, WA. 98005 CONTACT: STEVE LEUPOLD

(425) 623-5782 steven.leupold@gdit.com

RF MANAGER:

STA NETWORK SERVICES BELLEVUE, WA. 98005 CONTACT: MIKE LEE (425) 201-3751 mike2.lee@sta.samsung.com

PROIECT TEAM





GENERAL DYNAMICS

WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE:

11-20-12

ISSUED FOR: CONSTRUCTION DWGS

REVISIONS A 08/02/12 SSUED FOR 90% CD REVIEW B 09/19/12 SSUED FOR 100% CD REVIEW C 11/20/12 SSUED FOR FINAL 100% CD

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:



SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

С 122200

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND SPRINT INTEGRATED CONSTRUCTION STANDARDS FOR WIRELESS SITES (LATEST REVISION). THE SPECIFICATION IS THE RULING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THESE DRAWNINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE NEW WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE CATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS
- DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE WORK
- DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.
- 10. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE SUPERINTENDENT OF BUILDINGS & GROUNDS AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.
- RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- 13. MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATELY REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.
- . IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT.
- 15. REPAIR ALL EXISTING WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES.
- 16. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED
- . KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS LINTIL COMPLETION OF CONSTRUCTION
- 18. MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE
- 19. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE
- 20. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSTION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES.
- 21. LIGHT SHADED LINES AND NOTES REPRESENT WORK PREVIOUSLY DONE. DARK SHADED LINES AND NOTES REPRESENT THE SCOPE OF WORK FOR THIS PROJECT. CONTRACTOR SHALL VERIFY IF EXISTING CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIPOOR TO BEGINNING CONSTRUCTION.
- 22. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND/OR WIRING CERTIFICATES REQUIRED FOR THE ELECTRICAL SERVICE UPGRADE. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY COORDINATION AND SCHEDULING WITH THE SERVING ELECTRICAL UTILITY AND LOCAL INSPECTION AUTHORITIES.

ELECTRICAL NOTES

- 1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE
- 2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL COUPP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTAL OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
- 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDED BUT NOT BE LIMITED TO:

 - A. UL UNDERWRITERS LABORATORIES
 B. NEC NATIONAL ELECTRICAL CODE
 C. NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 D. OSHA OCCUPATIONAL SAFETY AND HEALTH ACT

 - IBC -- INTERNATIONAL BUILDING CODE NFPA -- NATIONAL FIRE CODES

- 4. DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND AND LOCATIONS WHEN
- 5. EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION
- 6. CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
- 8. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK
- MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- 10. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- 11. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION.
 CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- 12. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATION SET FORTH BY SPRINT
- 13. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER, THE COMPLETED SYSTEM SHALL BE FULL OPERATIVE AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
- 14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF
- 15. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS OR A PERIOD OF NOT LESS THAN TWO YEARS FROM DATE OF CUSTOMER'S ACCEPTANCE.
- 16. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OF THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN WITHIN 48 HOURS.
- 17. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- 18. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL
- 19. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO NOTES AND REQUIREMENTS.
- EXCAVATION. AND BACKFILLING. 20. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.
- 21 CONTRACTOR SHALL SLIBMIT SHOP DRAWINGS OR MANUFACTURES CATALOG INFORMATION OF ANY/AL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- 22. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' LIPON FINAL ACCEPTANCE
- 23. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 24. DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
- 25. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
- 26. REACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 1990 CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS — 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. ROS CONDUITS WHEN SPECIFIED, SHALL MEET UI.—6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR
- 27. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- 28. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, 600 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWG.
- 29. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- 30. SERVICE: 240/120V, SINGLE PHASE, 3 WIRE CONNECTIONS AVAILABLE FROM UTILITY COMPANY, OWNER OR OWNERS AGENT WILL APPLY FOR POWER
- 31. TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH MULE TAPE AS INDICATED ON
- 32. ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH.
- 33. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS, CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOM".
- 34. ALL BOLTS SHALL BE STAINLESS STEEL.

ANTENNA & COAX NOTES

- VERIFY EACH COAXIAL CABLE LENGTH, DIAMETER, ROUTING, COLOR CODING AND ALL APPURTENANCES WITH
- 2. THE MAXIMUM COAXIAL CABLE LENGTH AND CORRESPONDING COAXIAL CABLE DIAMETER IS SHOWN ON SHEET A-4. THIS CABLE LENGTH IS TO BE USED FOR FABRICATION OR CONSTRUCTION. ACTUAL ANTENNA CABLE LENGTH(S) MUST BE VERIFIED. COAXIAL CABLE SHALL BE PROVIDED BY GDIT.
- 3. ALL COAX CABLES SHALL UTILIZE GROUND KITS, GROUNDED AS FOLLOWS:
 - A NEAR ANTENNA RAD CENTER ELEVATION MIDDLE OF TOWER (MID-HEIGH OF ANTENNA), IF CABLE RUN IS OVER 200', BOTTOM OF TOWER,
 - D. AT MASTER GROUND BAR 3'-0" FROM MMBS-BBU CABINET

- 4. ALL TOP JUMPERS SHALL BE LENGTHS AS SHOWN AND INSTALLED BY CONTRACTOR
- 5. ALL CABLES SHALL BE COLOR CODED AS SHOWN ON SHEET RF-1 AND IN ACCORDANCE WITH SPRINT
- 6. BANDING SHALL BE IN ACCORDANCE WITH SHEET A-4, RF-1 AND AS FOLLOWS:
 - A. MAIN LINE COLOR BANDS SHALL BE 2" WIDE. MAINTAIN 1" SPACING BETWEEN COLORS.
 - B. FREQUENCY COLOR BANDS SHALL BE 2" WIDE WITH NO SPACE BETWEEN COLORS.
 C. JUMPER COLOR BANDS SHALL BE 1" WIDE WITH 1" SPACE.

 - D. START COLOR BANDS 2" BEYOND WEATHERPROOFING. E. START SELECTOR COLOR NEXT TO END CONNECTORS.
- 7. FINAL COAXIAL ANTENNA CABLE SIZES SHALL BE DETERMINED BY SAMSUNG RF ENGINEER. SEE ANTENNA SCHEDULE SHEET A-4. BASED ON FINAL CABLE RUN LENGTHS DETERMINED BY GD.
- 8. SEE CONSTRUCTION MANAGER FOR ANTENNA SUPPORT ASSEMBLY TYPE.
- 9. ALL COAXIAL CABLE WILL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE AT DISTANCES NOT TO EXCEED 3' OR THE CABLE MANUFACTURES SPECIFICATIONS WHICHEVER IS LESS, WITH HARDWARE SPECIFIED IN THE COAXIAL CABLE ROUTING DETAILS OF THE SUPPLIED STRUCTURAL REPORT.
- 10. PROVIDE AT LEAST 6" OF SLACK IN THE MAIN COAXIAL CABLES AT THE ANTENNA MOUNTING ELEVATION TO PROVIDE FOR FUTURE CONNECTOR REPLACEMENT.

ANTENNA & HYBRID CABLE NOTES

- 1. VERIFY EACH HYBRID CABLE LENGTH, ROUTING, DIAMETER, COLOR CODING AND ALL APPURTENANCES WITH GDIT
- HYBRID CABLE AND DIAMETER LENGTH IS SHOWN ON A-4. EXCESS CABLE LENGTHS TO BE DRESSED IN A MANNER APPROVED BY GDIT, CABLES CANNOT BE CUT TO FIT
- HYBRID CABLE INTERNAL GROUND WIRE TO BE GROUNDED AT TOP AND BOTTOM PER SAMUSUNG'S (SPRINT) SPECIFICATIONS.
- 4. EXCESS TOP 15' HYBRID CABLE FIBER JUMPERS TO BE DRESSED IN A MANNER APPROVED BY GDIT, CANNOT BE COILED, MUST BE SECURED TO TOWER MOUNTS.
- ALL MAIN CABLES SHALL BE COLOR CODED AS SHOWN ON SHEET RF-1 & IN ACCORDANCE WITH SPRINT SPECIFICATIONS.
- 6. BANDING SHALL BE IN ACCORDANCE WITH SHEET A-4, RF-1
 - B. JUMPER COLOR BANDS SHALL BE 2" WIDE WITH 1" SPACING BETWEEN.

 B. JUMPER COLOR BANDS SHALL BE 1" WIDE WITH 1" SPACE.

 - C. START COLOR BANDS 2" BEFORE MAIN CABLE END.
- 7. FINAL HYBRID CABLE SIZES SHALL BE DETERMINED BY SAMSUNG RF ENGINEER. SEE HYBRID CABLE SCHEDULE SHEET RF-1, BASED ON FINAL CABLE RUN LENGTHS DETERMINED BY GDIT.
- 3' HORIZONTALLY OR 4' VERTICALLY OR THE CABLE MANUFACTURER'S SPECIFICATIONS WHICHEVER IS LESS, WITH HARDWARE SPECIFIED IN THE HYBRID CABLE ROUTING DETAILS OF THE SUPPLIED STRUCTURAL SUPPORT.

SITE WORK NOTES

- 1. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
- 2. DO NOT SCALE BUILDING DIMENSIONS FROM DRAWING.
- 3. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY GENERAL CONTRACTOR AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT.
- ALL EXISTING UTILITIES, FACILITIES, CONDITIONS AND THEIR DIMENSIONS SHOWN ON PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NOT RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTMENT SYSTING UTILITIES.
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE
- 6. CONTRACTOR SHALL CALL LOCAL DIGGER HOT LINE FOR UTILITY LOCATIONS 48 HOURS PRIOR TO START OF
- 7. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
- 8. GRADING OF THE SITE WORK AREA IS TO BE SMOOTH AND CONTINUOUS IN SLOPE AND IS TO FEATHER INTO EXISTING GRADES AT THE GRADING LIMITS.
- ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
- 10. STRUCTURAL FILLS SUPPORTING PAVEMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR
- 11. NEW GRADES NOT IN BUILDING AND DRIVEWAY IMPROVEMENT AREA TO BE ACHIEVED BY FILLING WITH APPROVED CLEAN FILL AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY. 12. ALL FILL SHALL BE PLACED IN UNIFORM LIFTS. THE LIFTS THICKNESS SHOULD NOT EXCEED THAT WHICH CAN
- BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE. 13. ANY FILLS PLACED ON EXISTING SLOPES THAT ARE STEEPER THAN 10 HORIZONTAL TO 1 VERTICAL SHALL BE PROPERLY BENCHED INTO THE EXISTING SLOPE AS DIRECTED BY A GEOTECHNICAL ENGINEER.
- 14. CONTRACTOR SHALL CLEAN ENTIRE SITE DAILY AFTER CONSTRUCTION SUCH THAT NO PAPERS, THRASH, WEEDS, BRUSH OR ANY OTHER DEPOSITS WILL REMAIN. ALL MATERIALS COLLECTED DURING CLEANING OPERATIONS

SHALL BE DISPOSED OF OFF-SITE BY THE GENERAL CONTRACTOR.

- 15. ALL TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFILICT WITH THE IMPROVEMENTS SHALL BE PROTECTED BY THE GENERAL CONTRACTOR.
- 16. ALL SITE WORK SHALL BE CAREFULLY COORDINATED BY GENERAL CONTRACTOR WITH LOCAL UTILITY COMPANY, TELEPHONE COMPAY, AND ANY OTHER UTILITY COMPANIES HAVING JURISDICTION OVER THIS LOCATION.





GENERAL DYNAMICS

WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE:

11 - 20 - 12

ISSUED FOR: CONSTRUCTION DWGS

	REV.	DATE			DESCRIP*	TION		INITIA
	Α	08/02/12	ISSUED	FOR	90% CD	REVIEW		Pł
	В	09/19/12	ISSUED	FOR	100% C	D REVIE	W	WA
	С	11/20/12	ISSUED	FOR	FINAL 10	00% CD		Pł

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE



GENERAL NOTES

SHEET NUMBER:

122200

C

REVISION

FOUNDATION, EXCAVATION AND BACKFILL NOTES

- 1. ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL
- 2. ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS SUBSTANTIALLY HORIZONTAL AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDINGNS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM
- 3. CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE
- 4. ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2" MAX
- 5. ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557
- NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HRS PRIOR TO BACK FILLING.
- 7. FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED
- NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: NEWLY GRADED SORPACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC 17TE: TYPAR-35401 AS MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239-3841" OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICH EVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FDOT TYPE No. 57 FOR FENCED COMPOUND; FDOT TYPE No. 67 FOR ACCESS DRIVE AREA.
- 9. IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND
- 10. WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE—CONDITION AND/OR AERATE THE SOILS AND RE-COMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OF FILLS.
- 11. IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES
- 12. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE, FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
- 13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUB GRADE FLEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUB GRADE SHALL BE FILLED AND COMPACT WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUB GRADE.
- 14. PROTECT EXISTING GRAVEL SURFACING AND SUB GRADE IN AREAS WHERE FOULDMENT LOADS WILL OPERATE.
- 15. DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT
- 16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

ENVIRONMENTAL NOTES

- 1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.
- 2. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE
- 3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.
- NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS REPSONIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES WITH SILT AND EROSION CONTROL MEASURES MAINTAINED ON THE DOWNSTREAM SIDE OF SITE DRAINAGE. ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF EROSION WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY
- CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.
- 8. SEEDING SAND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.
- CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.
- 10. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

STRUCTURAL STEEL NOTES

ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW: W-SHAPES: ASTM A992, 50 KSI ANGLES, BARS CHANNELS: ASTM A36, 36 KSI HSS SECTIONS: ASTM 500 46 KS PIPE SECTIONS: ASTM A53-E, 35 KSI

- 2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
- 3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
- 4. NON-STURCUTRAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8"Ø ASTM A 307 BOLTS UNLESS NOTED OTHERWISE..
- 5. FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT

CONCRETE MASONRY NOTES

- 1. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1. (F'M=1,500 PS). MEDIUM WEIGHT (115 PCF).
- MORTAR SHALL BE TYPE "S" (MINIMUM 1,800 PSI AT 28 DAYS).
- 3. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRNGTH OF 3,000 PSI AT 28 DAYS.
- 4. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS AND ALL CELLS IN RETAINING WALLS AND WALLS BELOW GRADE SHALL BE SOLID GROUTED.
- 5. ALL HORIZONTAL REINFORCEMENT SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS.
- 6. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2" BELOW TOP OF THE UPPERMOST UNIT.
- 7. ALL BOND BEAM BLOCK SHALL BE "DEEP CUT" UNITS.
- 8. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT BASE OF VERTICAL CELLS HAVING GROUT LIFTS IN
- 9. ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR
- 10. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
- 11. REINFORCING BARS SEE NOTES UNDER "STRUCTURAL CONCRETE NOTES" FOR REQUIREMENTS.
- 12. PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY
- 13. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POUR HEIGHT IS 4 FEET.
- 14. HIGH LIFT GROUTED CONSTRUCTION MAY BE USED IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND SECTION 2104.6.1 OF U.B.C.
- 15. ALL CELLS IN CONCRETE BLOCKS SHALL BE FILLED SOLID WITH GROUT, EXCEPT AS NOTEED IN THE
- CELLS SHALL BE IN VERTICAL ALIGNMENT, DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES CONTAINING REINFORCING STEEL.
- 17. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTER AND JOINT
- SAND SHALL BE CLEAN, SHARP AND WELL GRADED, FREE FROM INJURIOUS AMOUNTS OF DUST, LUMPS, SHALE, ALKAU OR ORGANIC MATERIAL.
- 19. BRICK SHALL CONFORM TO ASTM C-62 AND SHALL BE GRADE MW OR BETTER

STRUCTURAL CONCRETE NOTES

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301-05, ACI 318-05 AND THE SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH fc'=3,000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNLESS NOTED
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST FARTH.................................. IN.

CONCRETE EXPOSED TO EARTH OR WEATHER:

#5 AND SMALLER & WWF...... 1 1/2 IN.

CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

- A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.N.O. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4
- 6. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLT, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
- 7. USE AND INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER ICBO & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

WEATHERPROOFING NOTES

STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES

3.6 WEATHERPROOFING CONNECTORS AND GROUND KITS:

- A. ALL CONNECTORS AND GROUND KITS SHALL BE WEATHERPROOFED USING BUTYL RUBBER WEATHERPROOFING AND TAPE. THIS INSTALLATION MUST BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION OR AS SHOWN ON THE CONSTRUCTION DRAWINGS (WHICHEVER IS GREATER). IF NO DIRECTION IS PROVIDED, WEATHERPROOFING MUST BE DONE PER THE FOLLOWING INSTRUCTIONS.
- 1. THE COAXIAL CABLE CONNECTION OR GROUND KIT CAN BE ENCOMPASSED INTO COLD SHRINK AND COMPLETELY WRAPPED WITH 2 INCH WIDE ELECTRICAL TAPE OVERLAPPING EACH ROW BY APPROXIMATELY ½" AND EXTENDING PAST THE CONNECTION BY TWO INCHES AS DISCUSSED BELOW; OR
- 2. THE COAXIAL CABLE CONNECTION OR GROUND KIT CAN BE WRAPPED WITH LAYERS OF ELECTRICAL/BUTYL RUBBER/ELECTRICAL TAPE AS DISCUSSED BELOW, OR
- 3. THE COAXIAL CABLE CONNECTION OR GROUND KIT CAN BE WRAPPED WITH TWO LAYERS OF 1.5 INCH WIDE SELF-AMALGAMATING TAPE COVERED WITH TWO LAYERS OF ELECTRICAL TAPE AS DISCUSSED BELOW.
- B. COLD SHRINK INSTALLATION PROCEDURE:
- 1. REQUIRED MATERIAL: COLD SHRINK TUBE, SPACERS AS NEEDED, BLACK ELECTRICAL TAPE-2 INCHES
- 2. REQUIRED TOOLS: KNIFE AND TAPE MEASURE

STEP 1: THOROUGHLY CLEAN AND DRY THE SURFACE OF COAXIAL CABLE AND CONNECTOR TO REMOVE ALL GREASE AND DIRT. MARK THE MAIN FEED (LARGER DIAMETER) COAXIAL CABLE AT LEAST TWO INCHES ABOVE THE CONNECTION AS THE SPECIFIED START DIMENSION FOR THE COLD SHRINK.

STEP 2: SLIDE THE COLD SHRINK TUBE OVER THE PRE-CONNECTORIZED END OF THE LARGER DIAMETER COAXIAL CABLE PRIOR TO MATING CONNECTOR INTERFACES. MAKE THE CONNECTION.

STEP 3: REMOVE WAX PAPER FROM A SPACER HALF AND PRESS ONTO COAXIAL CABLE DIRECTLY BEHIND THE CONNECTOR, REMOVE THE WAX PAPER FROM THE OTHER SPACER HALF AND ALIGN THE TWO SPACER HALVES WITH ADHESIVE PORTIONS FACING EACH OTHER. PRESS THE SPACER HALVES TOGETHER, THE SPACER WILL BE PLACED NEXT TO THE CONNECTOR ON THE SMALLER DIAMETER COAXIAL CABLE SIDE.

STEP 4: SLIDE THE COLD SHRINK TUBE OVER THE CONNECTION TO THE SPECIFIED START DIMENSION HOLD THE COLD SHRINK TUBE AND COAXIAL CABLE IN ONE HAND SO THAT THE EDGE OF COLD

STEP 5: WITH YOUR FREE HAND, BEGIN REMOVING COLD SHRINK TUBE CORE. THE CORE WILL BE REMOVED BY UNWINDING IN A COUNTERCLOCKWISE DIRECTION WHILE LIGHTLY PULLING THE ATTACHED CORD AWAY FROM THE TUBE.

STEP 6: USE BOTH HANDS TO CONTINUE THE UNWINDING PROCESS AS THE COLD SHRINK TUBE BEGINS TO COLLAPSE INTO POSITION. CONTINUE THE UNWINDING PROCESS UNTIL THE CORE IS COMPLETELY REMOVED AND THE COLD SHRINK TUBE IS INSTALLED.

STEP 7: EXCESS COLD SHRINK TUBE EXTENDING TWO INCHES BEYOND THE SPACER HALVES CAN BE REMOVED OR LEFT IN PLACE. EXCESS COLD SHRINK TUBE CAN BE CAREFULLY CUT OFF WITH A KNIFE. STEP 8: WRAP OVER THE COLD SHRINK TUBE WITH ONE LAYER OF BLACK ELECTRICAL TAPE 2 INCH SIEP 6: WRAP VOER THE COLD SHRIMIN TOBE WITH ONE LATER OF BLACK ELECTRICAL TAPE 2 INGLE WIDTH OVERLAPPING EACH ROW BY 1/2 INCH. THIS TOP LAYER MUST BE WRAPPED USING A SHINGLED EFFECT. THE LAYER SHALL BE WRAPPED SO THAT THE ENDS ARE IN THE UPWARD DIRECTION CREATING A SHINGLED EFFECT WITH THE TAPE SO WATER WILL BE REPELLED AND NOT ALLOCATED TO COLLECT AND POOL. THIS TOP LAYER OF ELECTRICAL TAPE MUST EXTEND TWO INCHES (THE TAPE WIDTH) PAST THE COLD SHRIMK TUBE ONTO THE UNDERLYING CABLE. TAPE SHALL BE WRAPPED SO THAT NO VOIDS OR AIR PACKETS ARE PRESENT. TAPE SHALL BE CUT WITH A SHARP KNIFE.

- C. BUTYL RUBBER TAPE INSTALLATION PROCEDURE:
- 1. REQUIRED MATERIAL: BLACK ELECTRICAL TAPE-2 INCH WIDE AND BUTYL RUBBER TAPE 2 TO 3 INCHES WIDE.
- 2. REQUIRED TOOLS: KNIFE OR SCISSORS.

STEP 1: THOROUGHLY CLEAN AND DRY THE SURFACE OF COAXIAL CABLE AND CONNECTOR TO REMOVE ALL GREASE AND DIRT. WRAP CONNECTOR/GROUND KIT WITH TWO LAYERS OF BLACK ELECTRICAL
TAPE-2 INCH WIDTH OVERLAPPING EACH ROW BY APPROXIMATELY 1/2 INCH. THESE LAYERS OF TAPE
MUST BE WRAPPED TIGHT ENOUGH SO THAT NO VOIDS OR AIR PACKETS ARE PRESENT AND MUST EXTEND ONE INCH PAST THE CONNECTOR/GROUND KIT ON EACH SIDE. TWO ROWS SHALL BE APPLIED, ONE IN EACH DIRECTION, WITH THE TOP ROW SHINGLED TO PROMOTE WATER RUNOFF.

STEP 2: WRAP CONNECTOR/GROUND KIT WITH ONE LAYER OF BUTYL RUBBER TAPE (2 TO 3 INCHES WIDTH) OVER THE BLACK ELECTRICAL TAPE OVERLAPPING EACH ROW BY APPROXIMATELY 1/2 INCH. THE BUTYL RUBBER TAPE MUST EXTEND 2 TO 3 INCHES (THE TAPE WIDTH) PAST THE ELECTRICAL TAPE AND COME IN GOOD CONTACT WITH THE UNDERLYING CABLE. ON CONNECTORS, WHEN WEATHERPROOFING FROM THE MAIN LINE TO THE JUMPER, BUILD UP THIS AREA WITH EXTRA BUTYL RUBBER TAPE TO INSURE A SMOOTH TRANSITION FREE OF VOIDS AND AIR PACKETS DOWN TO THE SMALLER DIAMETER CABLE.

STEP 3: WRAP CONNECTOR/GROUND KIT WITH TWO LAYERS OF BLACK ELECTRICAL TAPE 2 INCH WIDTH OVERLAPPING EACH ROW BY 1 INCH. THESE LAST TWO LAYERS MUST BE WRAPPED USING A SHINGLED EFFECT. THE TOP LAYER SHALL BE WRAPPED SO THAT THE ENDS ARE IN THE UPWARD DIRECTION CREATING A SHINGLED EFFECT WITH THE TAPE SO WATER WILL BE REPELLED AND NOT ALLOWED TO COLLECT AND POOL. THESE TOP LAYERS OF ELECTRICAL TAPE MUST EXTEND TWO INCHES (THE TAPE WIDTH) PAST THE BUTYL RUBBER TAPE ONTO THE UNDERLYING CABLE.

ALL LAYERS OF TAPE SHALL BE WRAPPED SO THAT NO VOIDS OR AIR PACKETS ARE PRESENT. THE LAST WRAP OF TAPE SHALL NOT BE PULLED OR STRETCHED. ALL TAPE SHALL BE CUT WITH A SHARP KNIFE OR SCISSORS.

- D. SELF-AMALGAMATING TAPE INSTALLATION PROCEDURE:
- 1. REQUIRED MATERIAL: SELF-AMALGAMATING TAPE 1.5 INCHES WIDE AND BLACK ELECTRICAL TAPE 2 INCHES WIDE.
- 2. REQUIRED TOOLS: KNIFE OR SCISSORS.

STEP 1: THOROUGHLY CLEAN AND DRY THE SURFACE OF COAXIAL CABLE AND CONNECTOR TO REMOVE ALL GREASE AND DIRT

STEP 2: START WRAPPING SELF-AMALGAMATING TAPE ON THE CABLE AT LEAST 2 INCHES FROM THE CONNECTOR/GROUND KIT. MAKE SURE TAPE IS STRETCHED TIGHT DURING THIS APPLICATION.

STEP 3: WHILE STRETCHING TAPE, MAKE ONE WRAP OF THE TAPE AROUND THE CABLE, MAKING SURE THE TAPE IS WRAPPED ONTO ITSELF. THE TAPE WILL ONLY ADHERE TO ITSELF.

STEP 4: CONTINUE WRAPPING THE CABLE AND CONNECTOR/GROUND KIT USING HALF OVERLAP (0.75

STEP 5: WRAP OVER AND PAST THE CONNECTOR/GROUND KIT AT LEAST 2 INCHES.

STEP 6: TO TERMINATE THE SELF-AMALGAMATING TAPE, WRAP THE TAPE AT LEAST ONE FULL ROUND OVER THE CABLE STRETCHING THE TAPE TIGHT. CUT THE TAPE USING KNIFE OR SCISSORS AND APPLY THE LOOSE END TO THE UNDERLYING SELF-AMALGAMATING TAPE USING THUMB PRESSURE.

STEP 7: TWO ROWS OF SELF-AMALGAMATING TAPE SHALL BE APPLIED IN THIS MANNER, IN ALTERNATING DIRECTIONS. THE TOP LAYER SHALL BE WRAPPED SO THAT THE ENDS ARE IN AN UPWARD DIRECTION CREATING A SHINGLED EFFECT WITH THE TAPE SO WATER WILL BE REPELLED.

STEP 8: WRAP OVER SELF-AMALGAMATING TAPE WITH TWO LAYERS OF BLACK ELECTRICAL TAPE-SIEP 8: WRAP OVER SELF-AMALGAMATING TAPE WITH TWO LAYERS OF BLACK ELECTRICAL TAPE— INCH WIDTH OVERLAPPING EACH ROW BY 1 INCH. THESE TOP TWO LAYERS MUST ALSO BE WRAPPED USING A SHINGLED EFFECT. WITH THE TAPE SO WATER WILL BE REPELLED AND NOT ALLOWED TO COLLECT AND POOL. THESE TOP LAYERS OF ELECTRICAL TAPE MUST EXTEND TWO INCHES (THE TAPE WIDTH) PAST THE SELF-AMALGAMATING TAPE ONTO THE UNDERLYING CABLE. ALL LAYERS OF TAPE SHALL BE WRAPPED SO THAT NO VOIDS OR AIR PACKETS ARE PRESENT. THE LAST WRAP OF TAPE SHALL BOWED TO BE PULLED OR STRETCHED. ALL TAPE SHALL BE CUT WITH A SHARP KNIFE OR EXCESSIONS.





GENERAL DYNAMICS

WIRELESS SERVICES



PROIECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE:

11-20-12

ISSUED FOR: CONSTRUCTION DWGS **REVISIONS** A 08/02/12 SSUED FOR 90% CD REVIEW WAS B 09/19/12 SSUED FOR 100% CD REVIEW

C 11/20/12 SSUED FOR FINAL 100% CD

NOT FOR CONSTRUCTION UNIFSS LARFLED AS CONSTRUCTION SET

LICENSURE

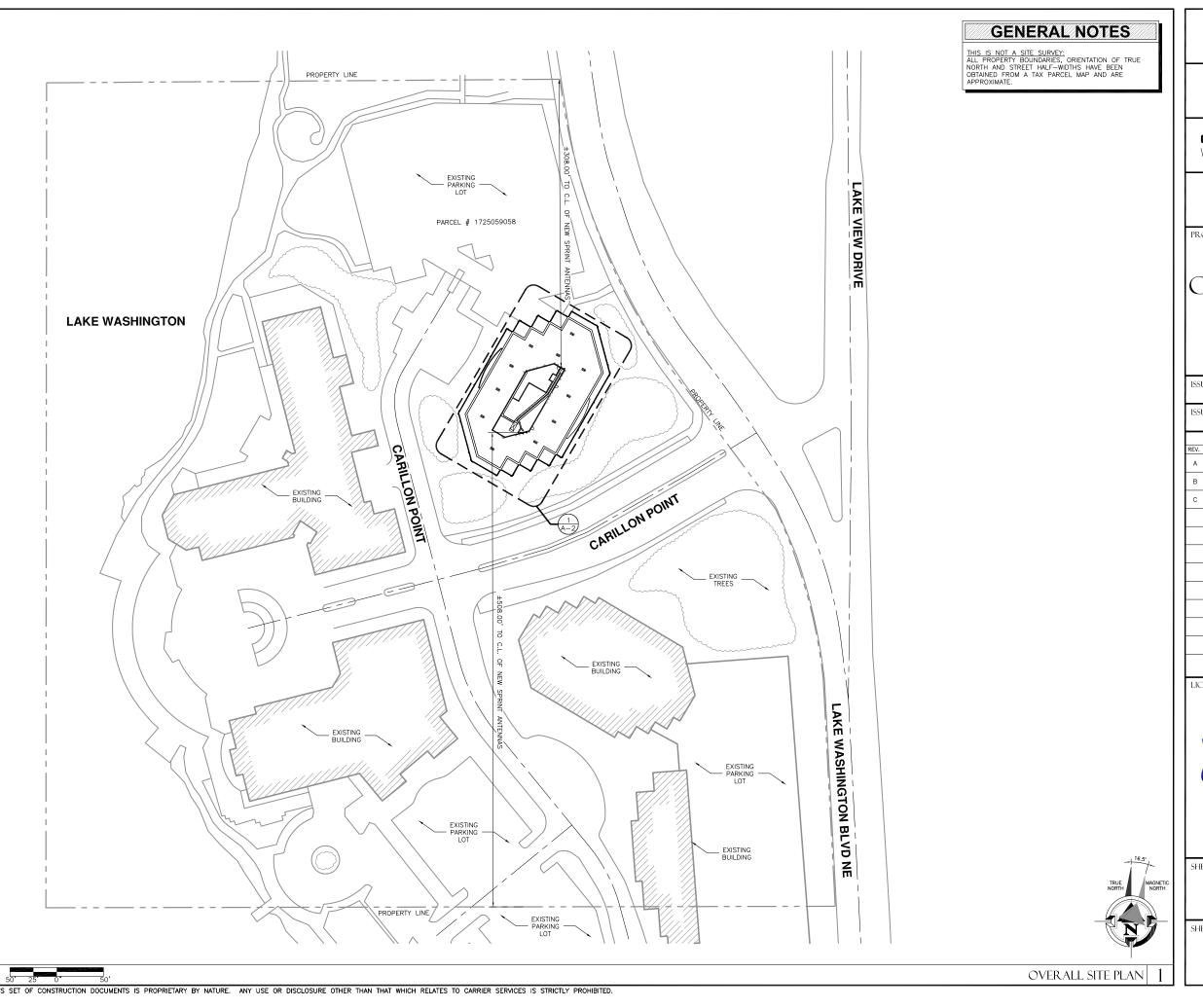


GENERAL NOTES

SHEET NUMBER:

122200

REVISION C







WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE:

11-20-12

ISSUED FOR: CONSTRUCTION DWGS

	REVISIONS							
REV.	DATE	DESCR	RIPTION	INITIAL				
Α	08/02/12	SSUED FOR 90% (D REVIEW	PK				
В	09/19/12	SSUED FOR 100%	CD REVIEW	WAS				
С	11/20/12	SSUED FOR FINAL	100% CD	PK				

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:



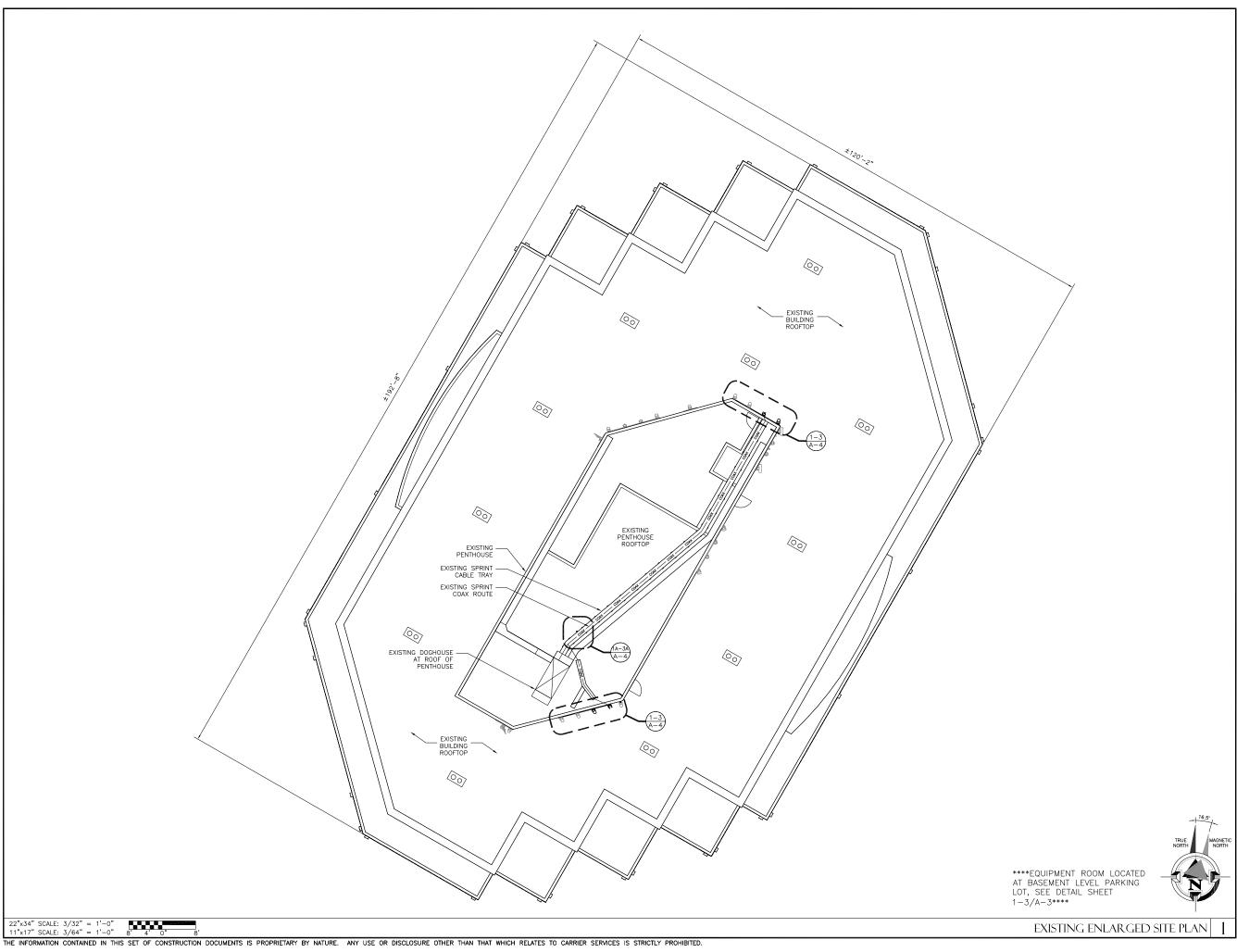
SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:



122200







WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE: 11-20-12

ISSUED FOR: CONSTRUCTION DWGS

		REVISIONS							
	REV.	DATE	DESCRIPTION	INITIALS					
	Α	08/02/12	ISSUED FOR 90% CD REVIEW	PK					
	В	09/19/12	ISSUED FOR 100% CD REVIEW	WAS					
ı	С	11/20/12	ISSUED FOR FINAL 100% CD	PK					
ı									
ı									
			T FOR CONSTRUCTION UNLESS BELED AS CONSTRUCTION SET						

LICENSURE:



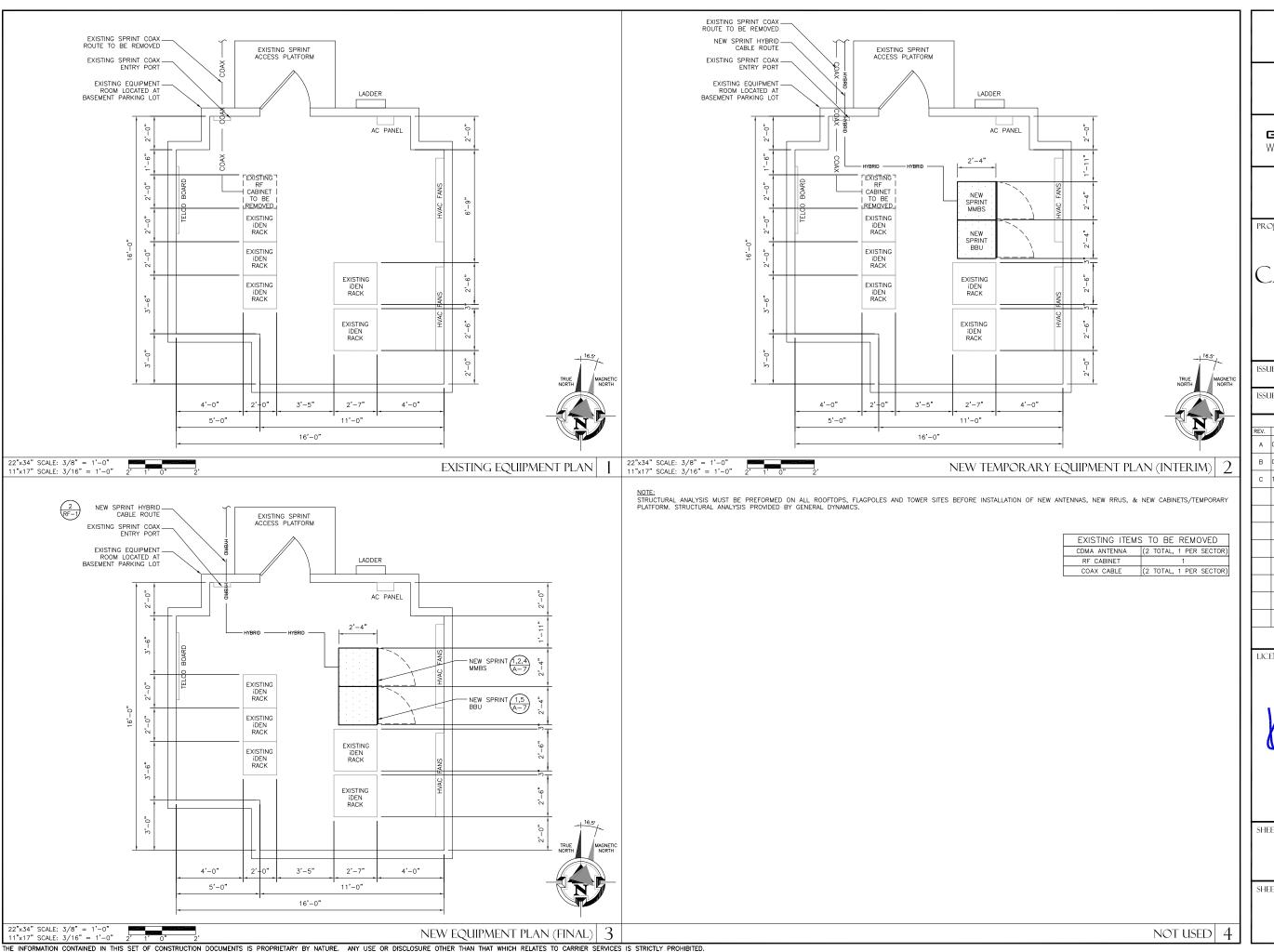
SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER:

REVISION: С

122200





WIRELESS SERVICES

ARCHITECTS.ENGINEERS, P.C.
4720 200TH STREET SW SUITE 200
1:NNWOOD, WAS 98038
PROVE: 425.072.0861
FAX: 425.772.0861

PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE: 11-20-12

ISSUED FOR: CONSTRUCTION DWGS

REVISIONS									
REV.	DATE	DESCRIPTION	INITIALS						
Α	08/02/12	ISSUED FOR 90% CD REVIEW	PK						
В	09/19/12	ISSUED FOR 100% CD REVIEW	WAS						
С	11/20/12	ISSUED FOR FINAL 100% CD	PK						

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

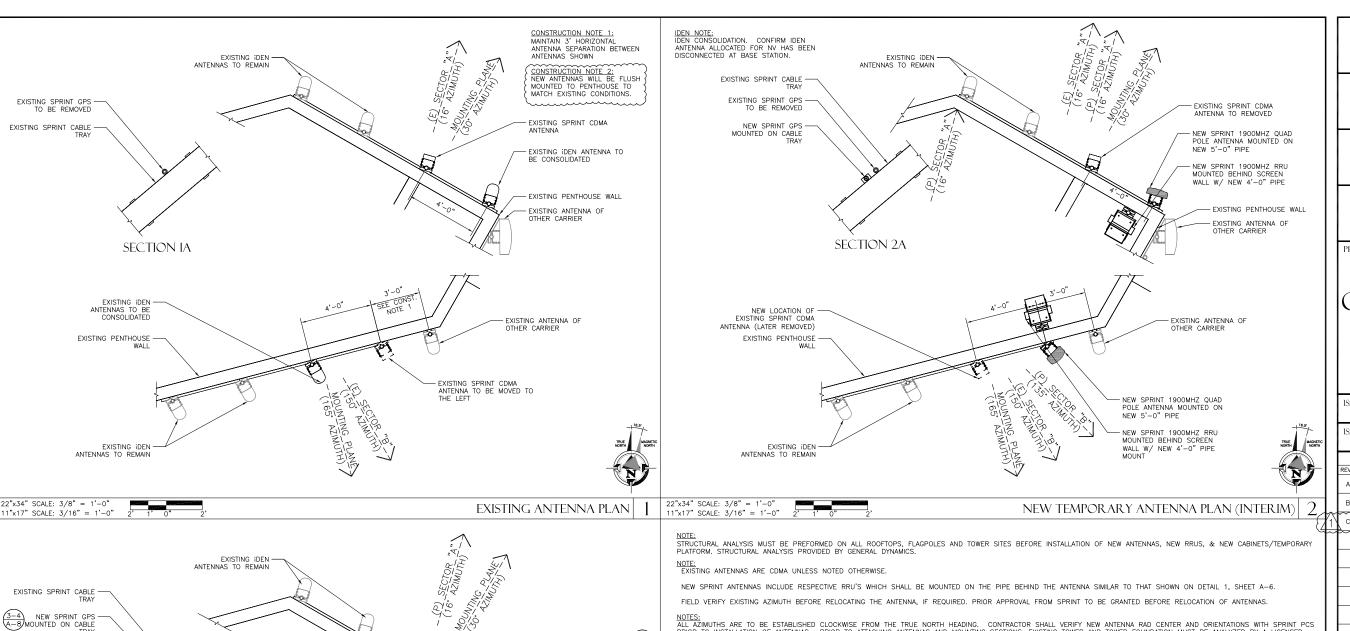
LICENSURE:



SHEET TITLE:

ENLARGED EQUIPMENT PLANS

SHEET NUMBER:



- NEW SPRINT 1900MHZ QUAD 1,6 POLE ANTENNA MOUNTED ON A-8

NEW SPRINT 1900MHZ RRU MOUNTED BEHIND SCREEN WALL W/ NEW 4'-0" PIPE

EXISTING PENTHOUSE WALL

EXISTING ANTENNA OF OTHER CARRIER

NEW 5'-0" PIPE

EXISTING ANTENNA OF OTHER CARRIER

NEW ANTENNA PLAN (FINAL) 3

NEW SPRINT 1900MHZ QUAD POLE ANTENNA MOUNTED ON A-8 NEW 5'-0" PIPE

- NEW SPRINT 1900MHZ RRU 5 MOUNTED BEHIND SCREEN 4-6 WALL W/ NEW 4'-0" PIPE MOUNT

NOTES:
ALL AZIMUTHS ARE TO BE ESTABLISHED CLOCKWISE FROM THE TRUE NORTH HEADING. CONTRACTOR SHALL VERIFY NEW ANTENNA RAD CENTER AND ORIENTATIONS WITH SPRINT PCS
PRIOR TO INSTALLATION OF ANTENNAS. PRIOR TO ATTACHING ANTENNAS AND MOUNTING SECTIONS, EXISTING TOWER AND TOWER FOUNDATION MUST BE ANALYZED BY A LICENSED
STRUCTURAL ENGINEER TO VERIFY TOWER IS CAPABLE OF SUPPORTING THE NEW LOADS. REFER TO STRUCTURAL ANALYSIS BY OTHERS. CONTRACTOR SHALL REFER TO TOWER
STRUCTURAL CALCULATIONS FOR ADDITIONAL LOADS. NO ERECTION OF MODIFICATION OF TOWER SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER.

1900 EQUIPMENT ONLY

	RRU / HYBRID CABLE SCHEDULE								
SECTOR	RRU MODEL	RRU FREQUENCY	HYBRID CABLE LENGTH	HYBRID CABLE DIAMETER				RET CABLE MANUFACTURER	RET CABLE MODEL NUMBER
ALPHA	RRH-P4	(1)1900MHz	230'	1.18"	1/2"	6'	6'	COMMSCOPE	iRET AISGv2.0
BETA	RRH-P4	(1)1900MHz	280'	1.18"/1.25"	1/2"	6'	6'	COMMSCOPE	iRET AISGv2.0
GAMMA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	ANTENNA SCHEDULE								
SECTOR	ANTENNA FREQUENCY	ANTENNA MFR.	ANTENNA MODEL	ANTENNA QUANTITY	AZIMUTH	RAD CENTER	ANT. SIZE	ELECT TILT	MECH TILT
ALPHA	1900 MHz	RFS	APXVRR13-C-A20	1 (PER SECTOR)	16*	96'-0"	54.8"	-3*	0,
BETA	1900 MHz	COMMSCOPE	HBXX-9014DS-A2M	1 (PER SECTOR)	135*	96'-0"	50.9"	-6.	0,
GAMMA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



GENERAL DYNAMICS WIRELESS SERVICES

ARCHITECTS.ENGINEERS, P.C.

4722 20011 STREET SW SUITE 200
LYNINVOOD, WA 98038
PRONE: 422.570.8855
PROC. 422.5712.0946

PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE: 11-20-12

ISSUED FOR: CONSTRUCTION DWGS REVISIONS

A 08/02/12 SSUED FOR 90% CD REVIEW B 09/19/12 SSUED FOR 100% CD REVIEW C 11/20/12 ISSUED FOR FINAL 100% CD

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE



ANTENNA PLANS &

SHEET NUMBER

REVISION: С 122200

NOTES & ANTENNA SCHEDULE

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

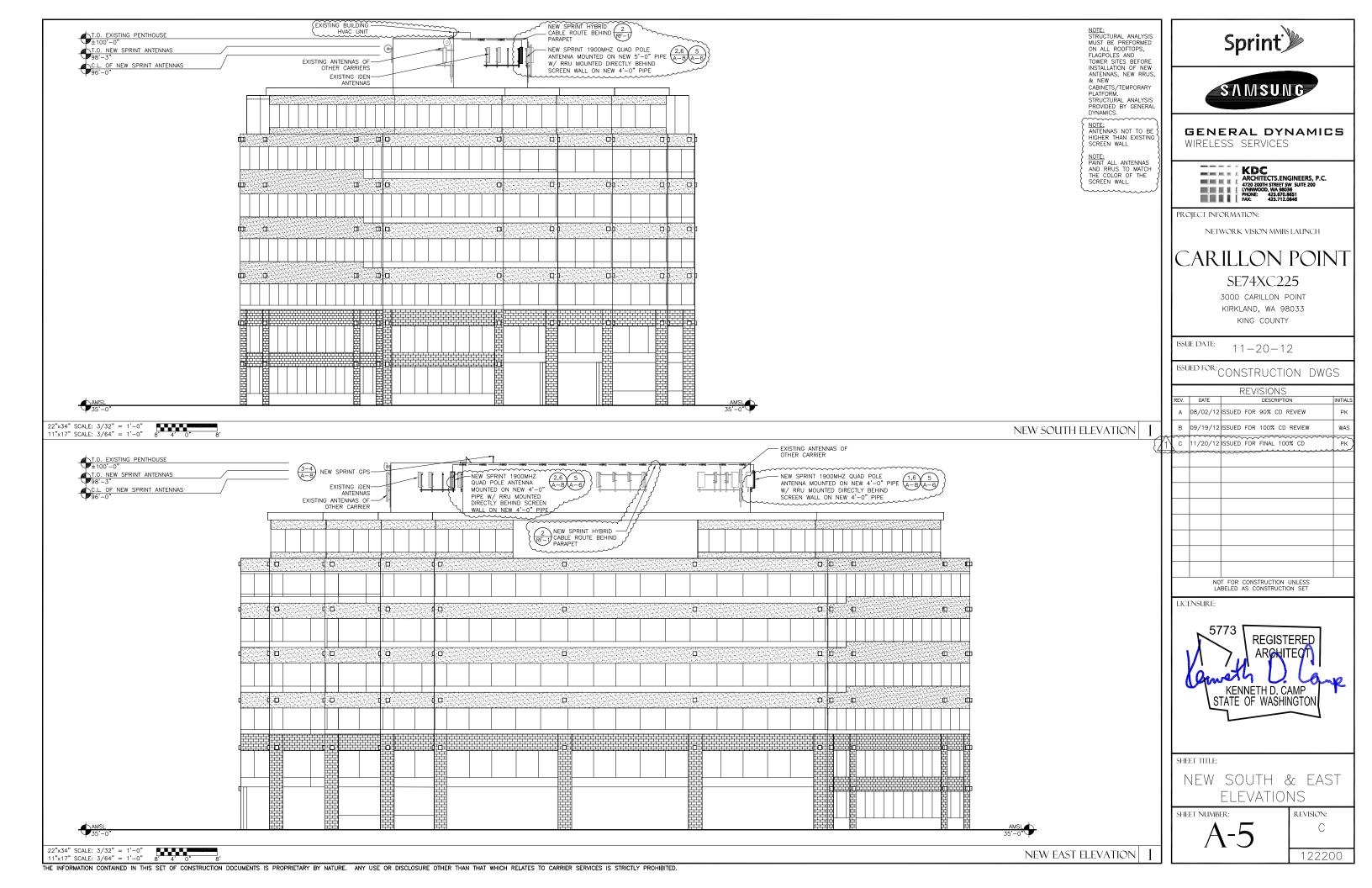
SECTION 3A

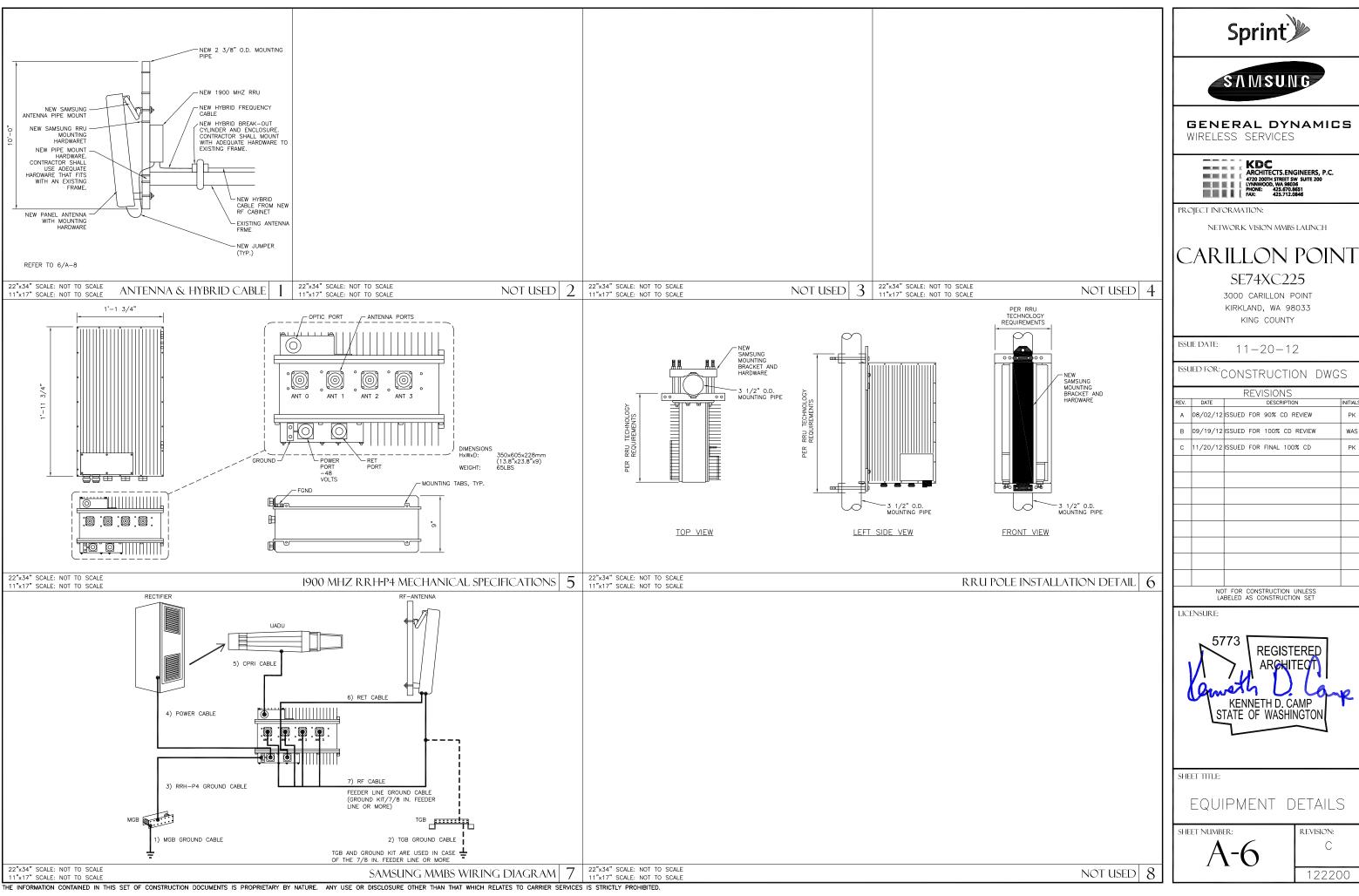
EXISTING PENTHOUSE

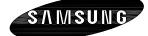
ANTENNAS TO REMAIN

22"x34" SCALE: 3/8" = 1'-0"

11"x17" SCALE: 3/16" = 1'-0"

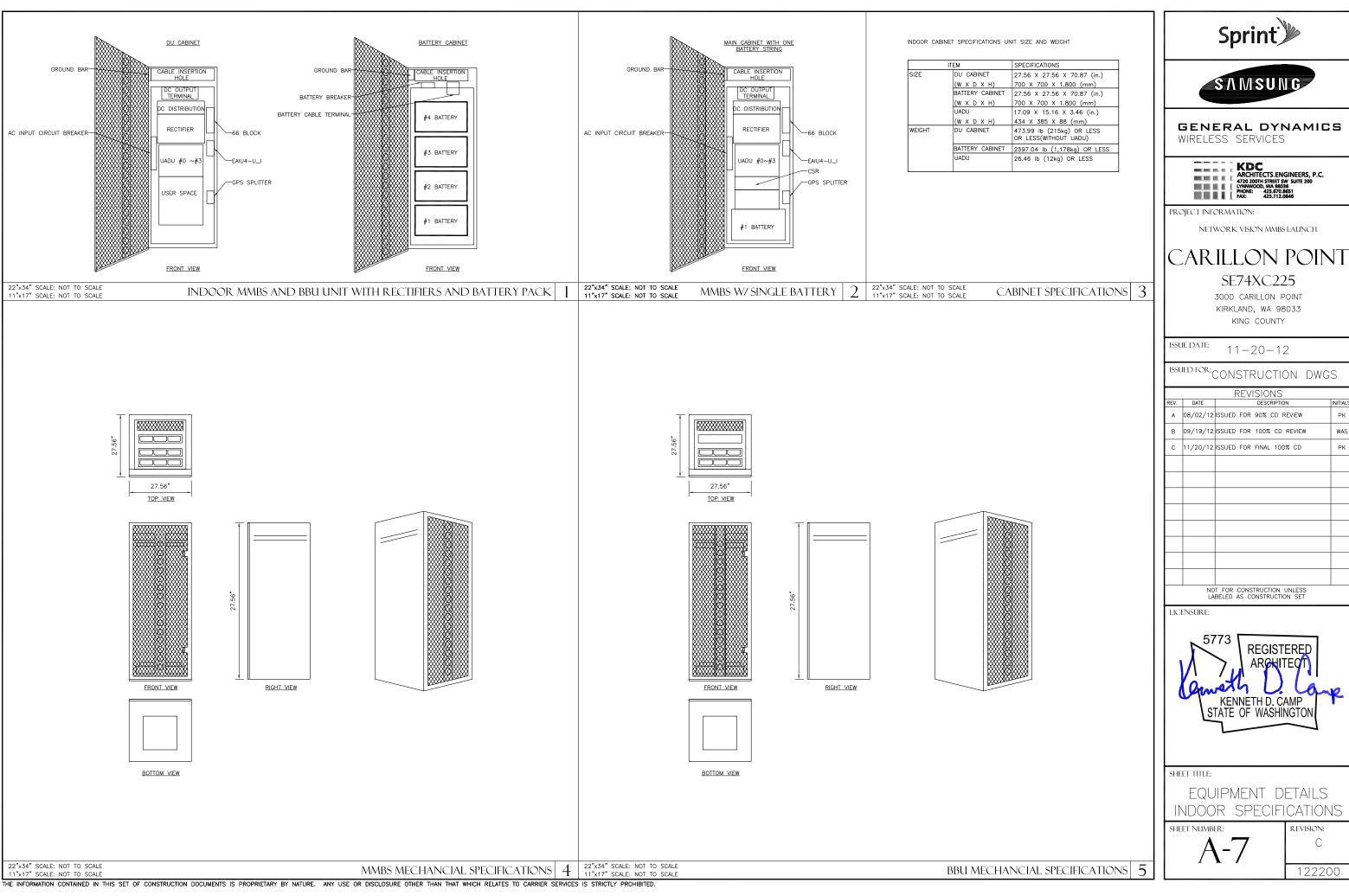


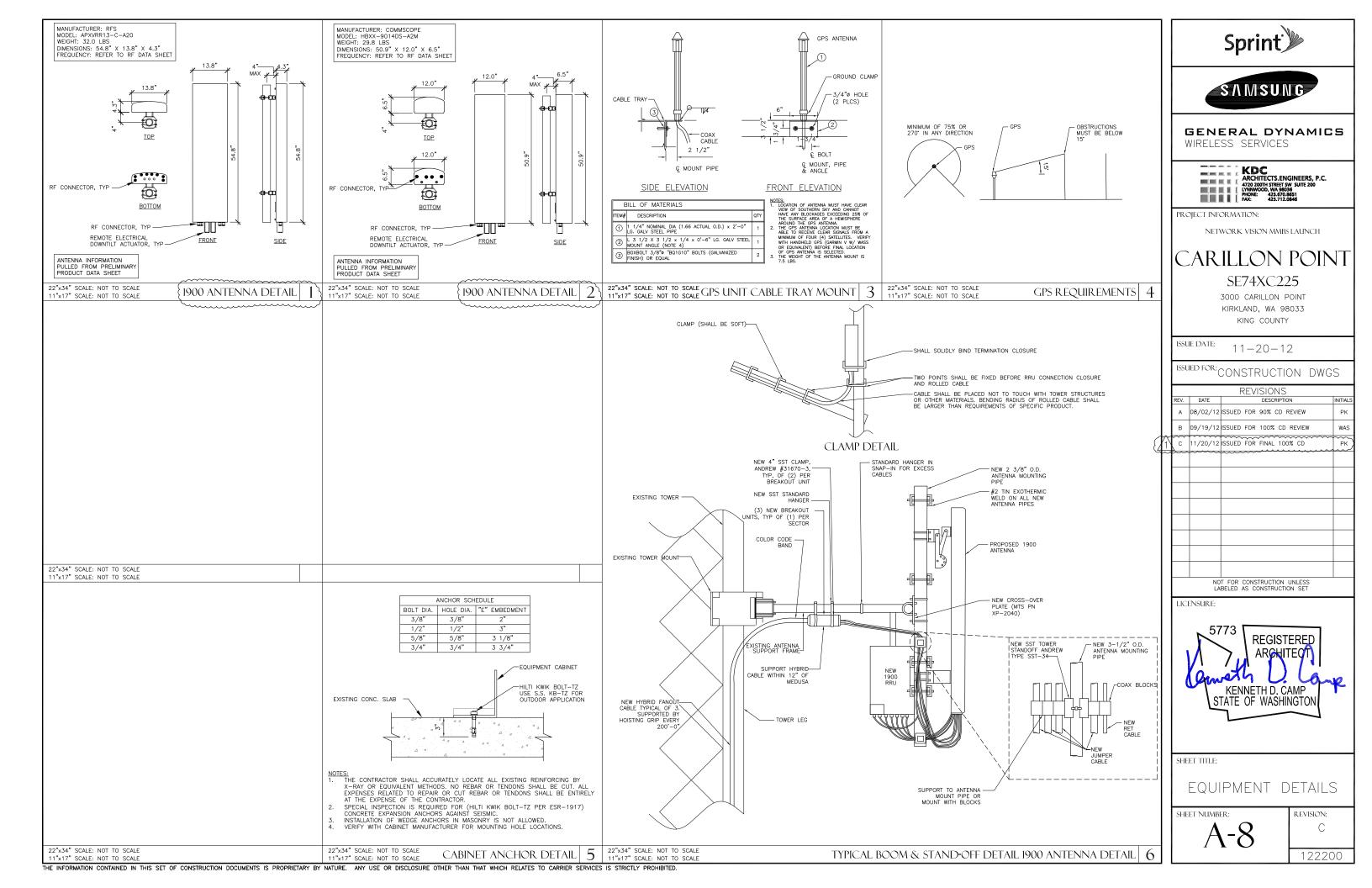




	REVISIONS								
REV.	DATE	DESCRIPTION	INITIALS						
Α	08/02/12	ISSUED FOR 90% CD REVIEW	PK						
В	09/19/12	ISSUED FOR 100% CD REVIEW	WAS						
С	11/20/12	ISSUED FOR FINAL 100% CD	PK						
	1		+						







TYPICA	L HYBRID	CABLE COL	OR CODE
SECTOR	FIRST RING	SECOND RING	THIRD RING
Α	GREEN	NO TAPE	NO TAPE
В	GREEN	GREEN	NO TAPE
G	GREEN	GREEN	GREEN

22"x34" SCALE: NOT TO SCALE

FREQUENCY COLOR CODE FOR PAIRS AND FIBER CABLES OF HYBRID CABLE					
FREQUENCY COLOR CODE	FIRST RING	SECOND RING			
800 MHz	YELLOW	GREEN			
1900 MHz	YELLOW	RED			

TYPICAL JUMPER CABLE COLOR CODE						
FREQUENCY	REQUENCY ANTENNA PORT RRU PORT		CABLE COLOR			
	RET	RET	N/A			
800 MHz	800 MHz +45°	ANT 1	WHITE			
	800 MHz -45°	ANT 0	BLUE			
	PCS1 -45*	ANT 0	BLUE			
	PCS1 +45°	ANT 1	WHITE			
1900 MHz	PCS2 -45*	ANT 2	GREEN			
	PCS2 +45°	ANT 3	BROWN			
	RET	RET	RED			

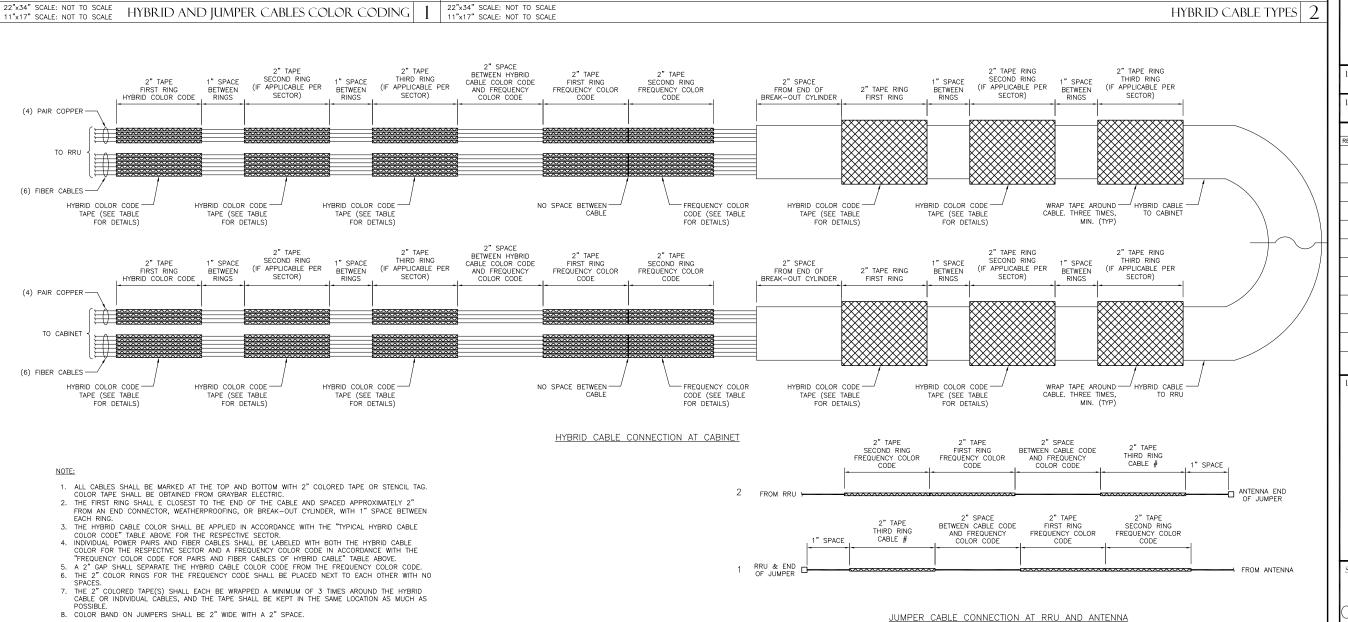
SUP	PLIER	S	SAMSUNG FIBEROPTICS						
TYPE	LENGTH	TOTAL	WEIGHT	WEIG	HT/LF	TOTAL	WEIGHT	WEIG (KG) 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	HT/LF
TIPE	(FT)	(KG)	(LBS)	(KG)	(LBS)	(KG)	(LBS)	(KG)	(LBS)
	60	13	28	0.2	0.5	19	41	0.3	0.7
TYPE 1	75	16	35	0.2	0.5	22	49	0.3	0.7
	90	19	42	0.2	0.5	26	57	WEIG (KG) 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.7
	105	30	66	0.3	0.6	29	65	0.3	0.7
	120	34	75	0.3	0.6	33	73	0.3	0.7
TYPE 2	135	38	85	0.3	0.6	46	101	0.3	0.7
	150	43	94	0.3	0.6	51	112	0.3	0.7
	165	47	104	0.3	0.6	55	122	0.3	0.7
	180	69	151	0.4	0.8	72	160		0.7
TYPE 3	195	75	164	0.4	0.8	78	173	0.3	0.7
	210	80	177	0.4	0.8	85	187	0.3 0.3 0.3 0.3 0.3 0.3	0.7
	225	89	196	0.4	0.9	102	224	0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.7
TYPE 4	240	95	209	0.4	0.9	109	239	0.3	0.7
	255	101	222	0.4	0.9	115	254	0.3	0.7
	270	133	293	0.5	1.1	122	270	0.3	0.7
	285	141	310	0.5	1.1	152	335	0.3	0.7
TYPE 5	300	148	326	0.5	1.1	160	353	0.3	0.7
	315	155	342	0.5	1.1	168	371	0.3	0.7
	330	163	359	0.5	1.1	176	388	0.3	0.7

TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6	TYPE 7
~114'-9.95"	~180'-5.35"	~213'-3.05"	~262'-5.60"	~328'-1"	~420'-0"	~550'-0"
AWG 10 1 PAIR, AWG 12 3 PAIR	AWG 8 1 PAIR, AWG 10 3 PAIR	AWG 6 1 PAIR, AWG 8 1 PAIR, AWG 10 2 PAIR	AWG 6 1 PAIR, AWG 8 3 PAIR	AWG 4 1 PAIR, AWG 6 1 PAIR, AWG 8 2 PAIR	AWG 4 1 PAIR, AWG 6 3 PAIR	AWG 2 1 PAIR, AWG 4 3 PAIR
0.98"	1.06"	1.18"	1.18"/1.25"	1.25"	1.56"	1.69"
11.81"	12.99"	15.35"	17.71"	17.71"	18.00"/30.00"	21.00"/35.00"
LC/PC-to-LC/PC, SINGLE MODE						
2 PAIR POWER AND OPTIC CABLE WITH PE PIPE						
AWG 8, 0.57"~0.60" AWG 10, 0.45"~0.48"					8 AWG CABLES 4 PAIRS	
2 PAIR POWER IND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE		2 PAIR POWER AND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABL WITH PE PIPE
	~114'-9.95" AWG 10 1 PAIR, AWG 12 3 PAIR 0.98" 11.81"	~114'-9.95" ~180'-5.35" AWG 10 1 PAIR, AWG 8 1 PAIR, AWG 12 3 PAIR AWG 10 3 PAIR 0.98" 1.06" 11.81" 12.99" 2 PAIR POWER 2 PAIR POWER ND OPTIC CABLE AND OPTIC CABLE	~114'-9.95" ~180'-5.35" ~213'-3.05" AWG 10 1 PAIR, AWG 8 1 PAIR, AWG 6 1 PAIR, AWG 10 3 PAIR AWG 8 1 PAIR, AWG 10 2 PAIR 0.98" 1.06" 1.18" 11.81" 12.99" 15.35" LC/PC- 2 PAIR POWER AWG 8, 0.57"~0.6 AWG 10, 0.45"~0. 2 PAIR POWER NO OPTIC CABLE AND OPTIC	## AWG 8 0.57"~0.60" AWG 8 0.57"~0.60" AWG 8 0.075"~0.60" AWG 8 0.075"~0.48" 2 PAIR POWER 2 PAIR POWER 2 PAIR POWER 10 POTIC CABLE AND OPTIC CABLE AND	~114'-9.95" ~180'-5.35" ~213'-3.05" ~262'-5.60" ~328'-1" AWG 10 1 PAIR, AWG 8 1 PAIR, AWG 6 1 PAIR, AWG 6 1 PAIR, AWG 6 1 PAIR, AWG 10 3 PAIR AWG 10 2 PAIR 0.98" 1.06" 1.18" 1.18"/1.25" 1.25" 11.81" 12.99" 15.35" 17.71" 17.71" LC/PC-to-LC/PC, SINGLE MODE 2 PAIR POWER AND OPTIC CABLE WITH PE PIPE AWG 8, 0.57"~0.60" AWG 10, 0.45"~0.48" 2 PAIR POWER 2 PAIR POWER 2 PAIR POWER NO OPTIC CABLE AND OPTIC CABLE AND OPTIC CABLE AND OPTIC CABLE AND OPTIC CABLE BAIR POWER NO OPTIC CABLE AND OPTIC CABLE BAIR POWER NO OPTIC CABLE BAIR POWER NO OPTIC CABLE BAIR POWER CABLE BAND OPTIC CABLE BAIR OPTIC CABLE BAIR POWER CABLE BAND OPTIC	### AWG 8 1 PAIR, AWG 8 1 PAIR, AWG 6 1 PAIR, AWG 8 1 PAIR, AWG 8 1 PAIR, AWG 10 3 PAIR AWG 10 1.18" 1.18"/1.25" 1.25" 1.56" ### Comparison of the comparison of th

SUP	PLIER	TESSC0				
TYPE	LENGTH	TOTAL WEIGHT				
IIFE	(FT)	(KG)	(LBS)			
	1	0.73	1.6			
TYPE 6	1000	732	1613			
	420	402	887			
	1	1	2.2			
TYPE 7	1000	1006	2218			
	550	553	1220			

 $\frac{\text{NOTES:}}{\text{ON HIGH}} \text{ CAPACITY SITES OR ON FOUR-SECTOR SITES NEEDING AN ADDITIONAL LINE AND RRUCONTACT GDIT SITE SUPERVISOR FOR COLOR CODE INFORMATION ON ADDITIONAL LINES.}$

22"x34" SCALE: NOT TO SCALE



HYBRID CABLE COLOR SCHEME DETAIL 3



GENERAL DYNAMICS

WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE: 11-20-12

ISSUED FOR: CONSTRUCTION DWGS

REVISIONS A 08/02/12 SSUED FOR 90% CD REVIEW B 09/19/12 SSUED FOR 100% CD REVIEW WAS C 11/20/12 SSUED FOR FINAL 100% CD

> NOT FOR CONSTRUCTION UNLESS
> LABELED AS CONSTRUCTION SET D AS CONSTRUC



EXPIRES: 08/09/2014

ANTENNA AND CABLE COLOR CODING DETAILS

122200

ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL LOCAL AND STATE CODE, LAWS. AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC
- CONTRACTOR SHALL COORDINATE WITH LOCAL POWER COMPANY FOR REQUIREMENTS OF POWER SERVICE LINE TO THE METER BASE, WHEN REQUIRED. POWER SERVICE REQUIREMENT IS COMMERCIAL. AC NOMINAL 120/208 VOLT OR 120/240 VOLT, SINGLE PHASE WITH 200 AMP RATING.
- 3. CONTRACTOR SHALL COORDINATE WITH LOCAL TELEPHONE COMPANY FOR SERVICE LINE REQUIREMENTS TO TERMINATE AT THE PPC CABINET.
- 4. CONTRACTOR SHALL FURNISH AND INSTALL ELECTRIC METER BASE AND 200A DISCONNECT SWITCH PER SITE PLAN DETAIL DRAWINGS AND PER LOCAL UTILITY COMPANIES SPECIFICATION, WHEN REQUIRED. THE METER BASE SHOULD BE LOCATED IN A MANNER WHERE ACCESSIBLE BY THE LOCAL POWER COMPANY.
- 5. LOCAL POWER COMPANY SHALL PROVIDE 200 AMP ELECTRIC METER. CONTRACTOR SHALL COORDINATE INSTALLATION OF METER WITH LOCAL POWER COMPANY
- 6. UNDERGROUND POWER AND TELCO SERVICE LINES SHALL BE ROUTED IN A COMMON TRENCH. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 AND CONDUIT EXPOSED ABOVE GROUND SHALL BE GALVANIZED RIGID STEEL TUBING UNLESS OTHERWISE
- 7. ALL TELCO CONDUIT LINES SHALL BE 4" SCH. 40 PVC CONDUIT UNLESS OTHERWISE INDICATED. THE TELCO CONDUIT FROM THE PPC SHALL BE ROUTED AND TERMINATED AT DESIGNATED TELCO DEMARCATION OR 2-FEET OUTSIDE FENCED AREA, NEAR UTILITY POLE (IN FENCED AREA), OR END CAP OFF AND PROVIDE MARKER STAKE PAINTED BRIGHT ORANGE WITH DESIGNATION FOR TELCO SERVICE.
- 8. CONDUITS INSTALLED AT PCS EQUIPMENT ENDS PRIOR TO THE EQUIPMENT INSTALLATION SHALL BE STUBBED AND CAPPED AT 6" ABOVE GRADE OR PLATFORM. IF SERVICE LINES CAN'T BE INSTALLED INITIALLY, PROVIDE NYLON PULL CORD IN CONDUITS.
- 9. THE SPRINT CABINET, INCLUDING 200 AMP LOAD PANEL AND TELCO PANEL, SHALL BE PROVIDED BY OWNER AND INSTALLED BY THE CONTRACTOR. CONTRACTOR IS TO INSTALL BREAKER(S) NOT PROVIDED BY MANUFACTURER. SEE PANEL SCHEDULE ON THIS SHEET FOR BREAKER REQUIREMENTS
- 10. LOCATION OF ELECTRIC METER AND DISCONNECT SWITCH TO BE PROVIDED BY GENERAL CONTRACTOR.
- 11. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS. THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- 12. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO
- 13. THE CONDUIT RUNS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS
- 14. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.

22"x34" SCALE: NOT TO SCALE

11"x17" SCALE: NOT TO SCALE

22"x34" SCALE: NOT TO SCALE

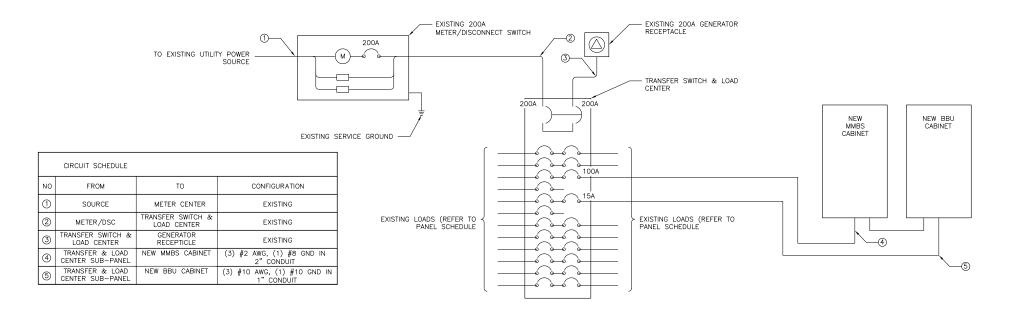
ELECTRICAL NOTES (CON'T)

- 16. ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
- 17. ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUNDING BUSHINGS.
- 18. ALL WIRE SHALL BE "TYPE THWN, SOLID. ANNEALED COPPER UP TO SIZE 1/10 AWG (18 AND LARGER SHALL BE CONCENTRIC STRANDED) 75 DEGREE C, (167 DEGREES F), 98 CONDUCTIVITY. MINIMUM #12.
- ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS, ACTION CRAFT, BRADY, OR APPROVED EQUAL.
- 20. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
- 21. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION TO CONFLICTS, VERIFY WITH MECHANICAL CONTRACTOR AND COMPLY AS REQUIRED.
- 22. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN NOT HAND WRITTEN.
- 23. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES. PULLBOXES, AND ALL DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- 24. THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS. DOCUMENT ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. SUBMIT AT SUBSTANTIAL COMPLETION.
- 25. ALL DISCONNECT SWITCHES AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM (NO EXCEPTIONS.) PROVIDE SAMPLE FOR CONSTRUCTION MANAGER'S
- 26. ALL ELECTRICAL DEVICES AND INSTALLATIONS OF THE DEVICES SHALL COMPLY WITH (ADA) AMERICANS WITH DISABILITIES ACT AS ADOPTED BY THE APPLICABLE
- 27. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT CONSTRUCTION MANAGERS APPROVAL. SLEEVES ANO/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.
- 28. ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE PRIOR TO ROUGH-IN OF CONDUIT AND WIRE. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA FURNISHED ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME EQUIPMENT CHARACTERISTICS MAY VARY FROM DESIGN AS SHOWN ON THESE DRAWINGS).
- 29 LOCATION OF ALL OUTLIET BOXES FTC. AND THE TYPE OF CONNECTION (PLUG COURTION OF ALL UDILLET, BUXES, ETC., AND THE TYPE OF CONNECTION (PLUG OR DIRECT) SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.

MAIN MOU ENCL	AGE: 240V/120 BREAKER: 200 AMP NT: SURFACE OSURE TYPE: NEMA 3R	MODEL NUME PHASE: BUSS RATING NEUTRAL BA N to GROUN INTERNAL TV	G: R: D BOND:	TBD 1 200 AMP YES TBD TBD		E:):)UND BAF	3 TBD R: TBD	
		BREAKER	BREAKER	BREAKER	BREAKER	BREAKER		
СКТ	LOAD DESCRIPTION	AMPS		STATUS			LOAD DESCRIPTION	СКТ
1	4812 CABINET	150	4	ON	1	30	TVS S	2
3				ON	1			4
5				ON		10	FAN	6
7				ON		20	GFCI	8
9	SAMSUNG MMBS CABINET	100	2	ON		20	LIGHT	10
11				ON		20	SPARE	12
13	SAMSUN BBU CABINET	15	1	N/A				14
15	BLANK			N/A				16
17	BLANK			N/A				18
19	BLANK			N/A				20
21	BLANK			N/A				22
23	BLANK			N/A				24

GENERAL CONTRACTOR TO CHECK REQUIREMENTS WITH LOCAL POWER COMPANY AND JURISDICTION. ADDITIONAL SUB PANEL OFF THE PPC CABINET MIGHT BE REQUIRED TO FEED NEW NETWORK VISION EQUIPMENT

ELECTRICAL PANEL SCHEDULE 2 ELECTRICAL NOTES





GENERAL DYNAMICS WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE:

11 - 20 - 12

ISSUED FOR: CONSTRUCTION DWGS

REVISIONS A 08/02/12 SSUED FOR 90% CD REVIEW B 09/19/12 SSUED FOR 100% CD REVIEW WAS C 11/20/12 ISSUED FOR FINAL 100% CD

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION OF



ONE-LINE DIAGRAM & POWER PANEL SCHED

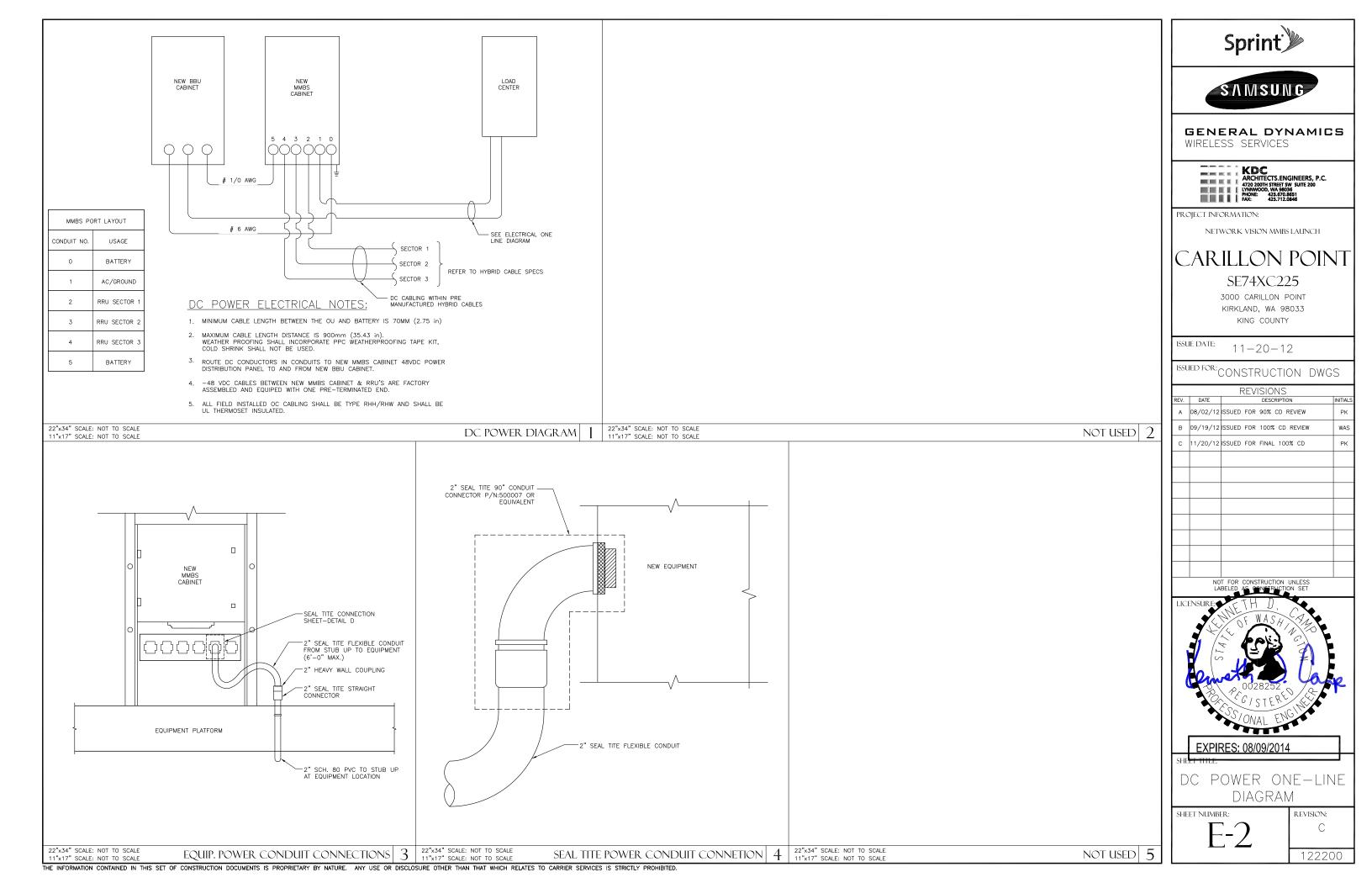
SHEET NUMBER

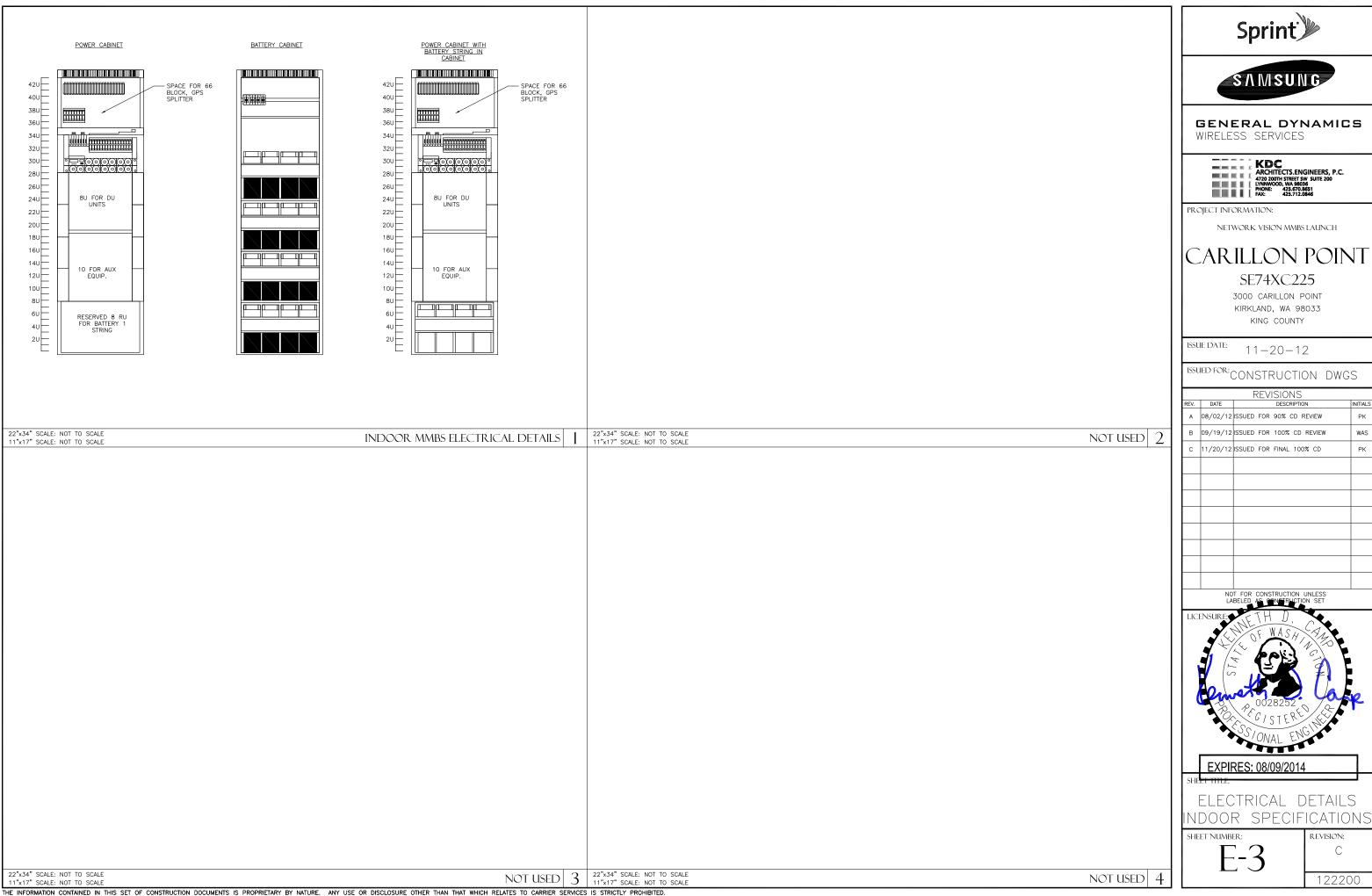
ELECTRICAL ONE-LINE DIAGRAM 3

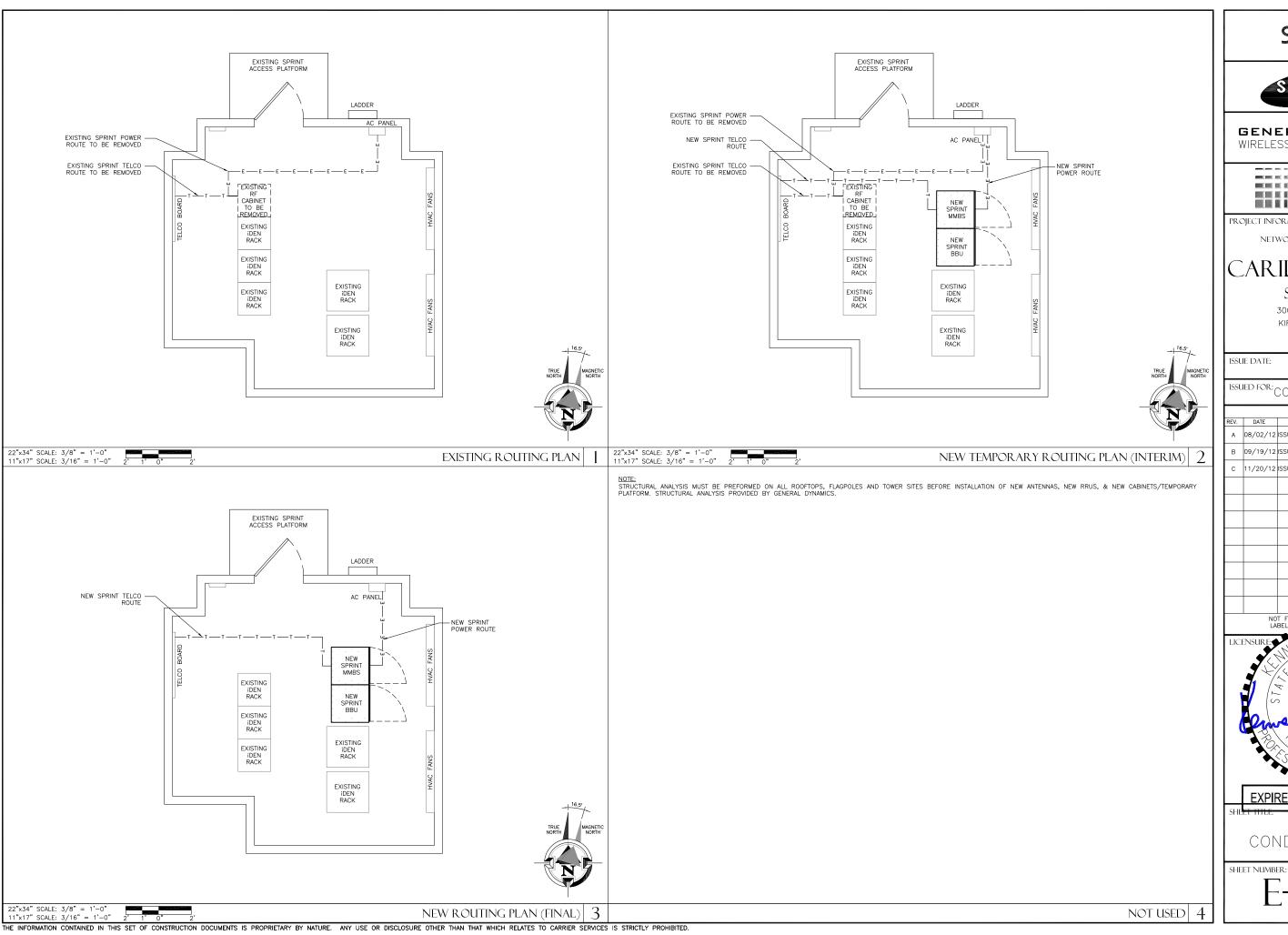
122200

REVISION: C

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.











WIRELESS SERVICES

ARCHITECTS.ENGINEERS, P.C.
4720 200TH STREET SW SUITE 200
17NNWOOD, WA 98038
PHONE: 425.070.8851
FAX: 425.712.0846

PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

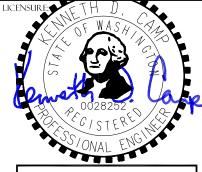
3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

11-20-12

ISSUED FOR: OCCUPATION DATES

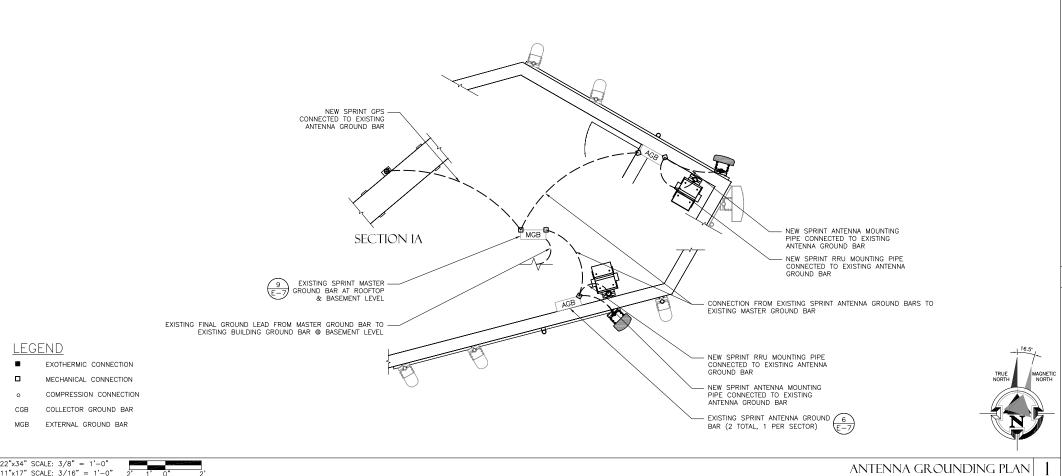
1330	ilD TCR.	CONSTRUCTION DWG	S
		REVISIONS	
REV.	DATE	DESCRIPTION	INITIALS
А	08/02/12	ISSUED FOR 90% CD REVIEW	PK
В	09/19/12	ISSUED FOR 100% CD REVIEW	WAS
С	11/20/12	ISSUED FOR FINAL 100% CD	PK

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



EXPIRES: 08/09/2014

CONDUIT ROUTING



ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION
 AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.

- 2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
- 3. ALL GROUND CONNECTIONS SHALL BE EXOTHERMIC. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE.
 GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED
 BY SPRINT WIRELESS, LLC. REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
- 6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM PER SPRINT STANDARD GROUNDING METHOD, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT MOBILITY REPRESENTATIVE, PRIOR TO INISTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL EXOTHERMIC AND GROUND RING
- 7. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES
 INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- ALL EXISTING GROUND BARS, WIRES & CONNECTIONS SHALL BE FIELD VERIFIED. ANY DEFICIENT ITEMS SHALL BE REPLACED AS REQUIRED TO ACHIEVE ADEQUATE GROUNDING REQUIRED BY SPRINT.

GENERAL GROUNDING NOTES

GROUNDING NOTES

- EXOTHERMIC WELDS (2). 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
- ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING, ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
- 4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- 5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
- GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- 8. WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- 9. SUPPLIED AND INSTALLED BY CONTRACTOR.

EQUIPMENT GROUNDING PLAN (FINAL) 3

- 10. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
- 11. EXTEND TWO (2) 2 AWG TINNED CU CONDUCTOR FROM BURIED GROUNDING RING AND CONNECT TO THE NEW TOWER. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GROUNDING CONNECTIONS TO THE TOWER. (APPLICABLE TO NEW TOWERS ONLY.)
- 12. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BARS AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.
- 13. EXPOSED GROUND WIRES TO BE NON METALLIC LIQUID TIGHT.





GENERAL DYNAMICS

WIRELESS SERVICES



PROJECT INFORMATION:

NETWORK VISION MMBS LAUNCH

CARILLON POINT

SE74XC225

3000 CARILLON POINT KIRKLAND, WA 98033 KING COUNTY

ISSUE DATE: 11-20-12

ISSUED FOR: CONSTRUCTION DWGS

> NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



EXPIRES: 08/09/2014

SHEET TITL

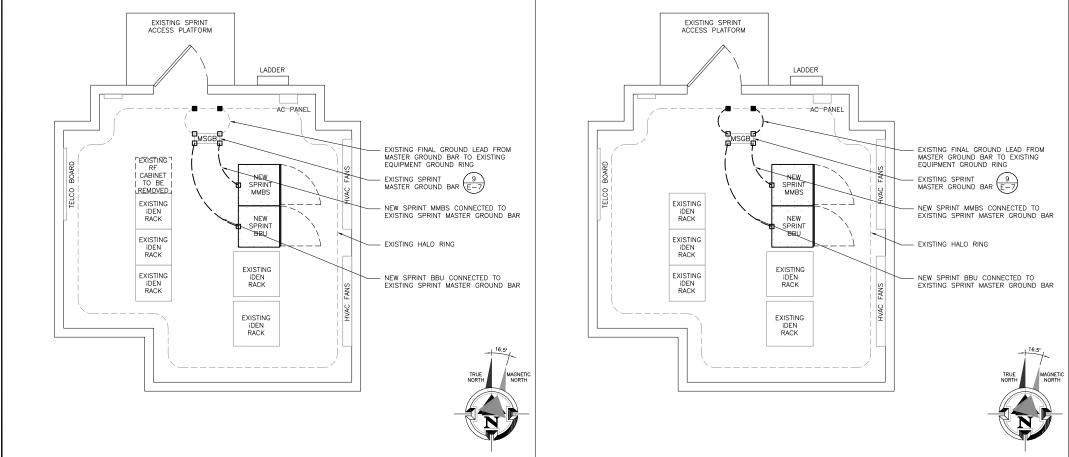
GROUNDING PLAN

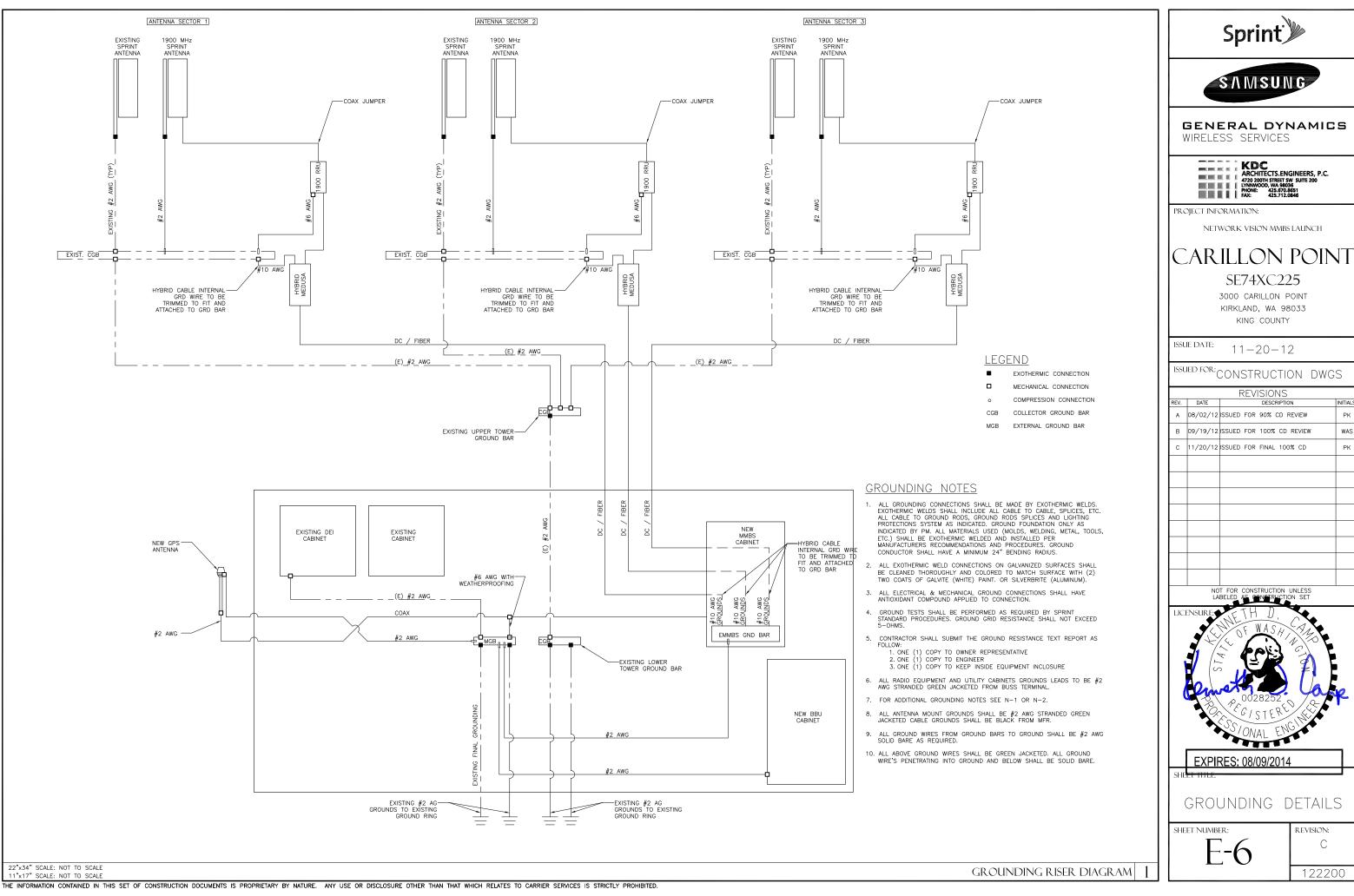
SHEET NUMBER:

E-5

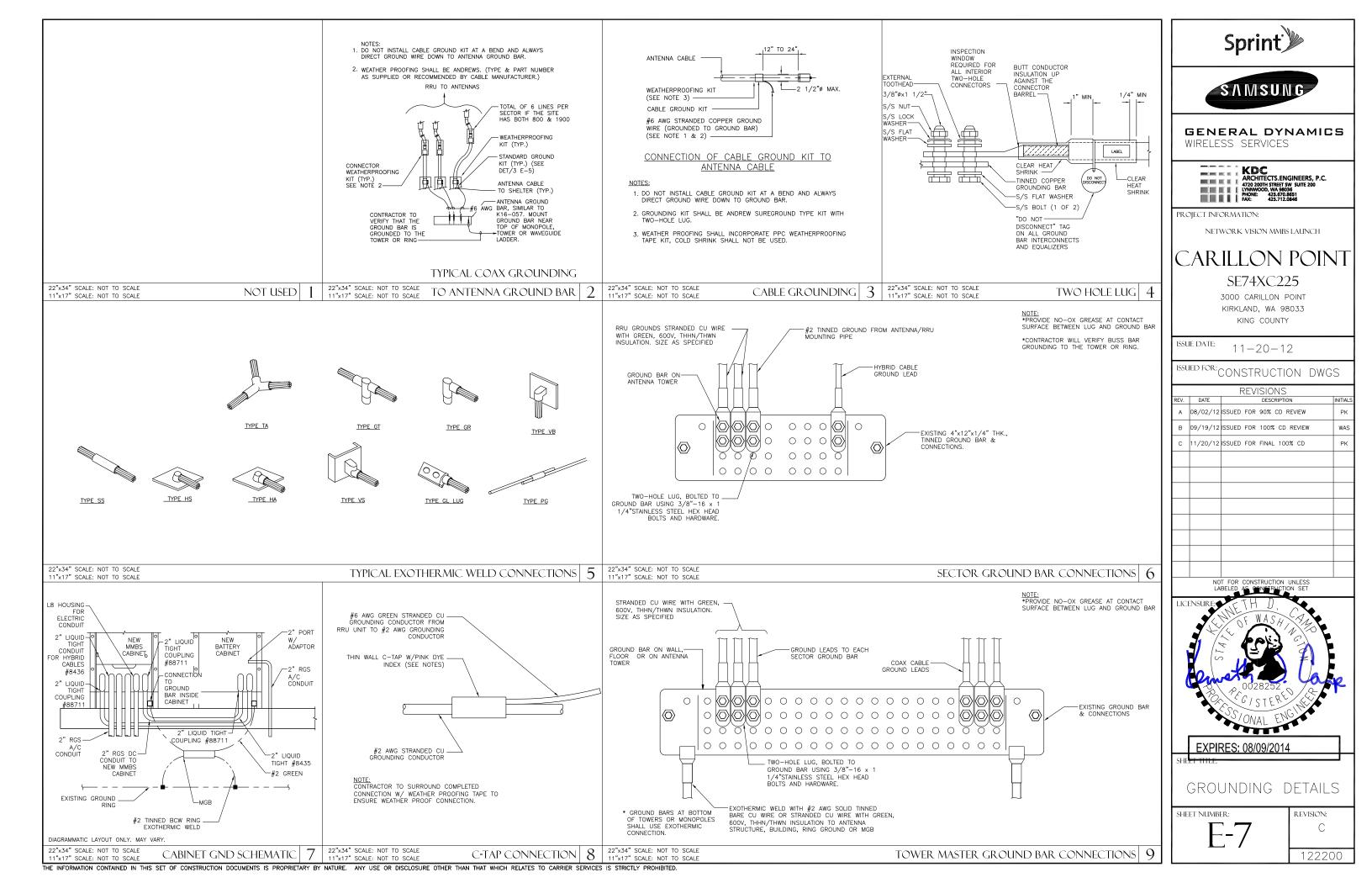
122200

revision: C





WAS



KDC

ARCHITECTS.ENGINEERS, P.C. 4720 200TH STREET SW SUITE 200 LYNNWOOD, WA 98036

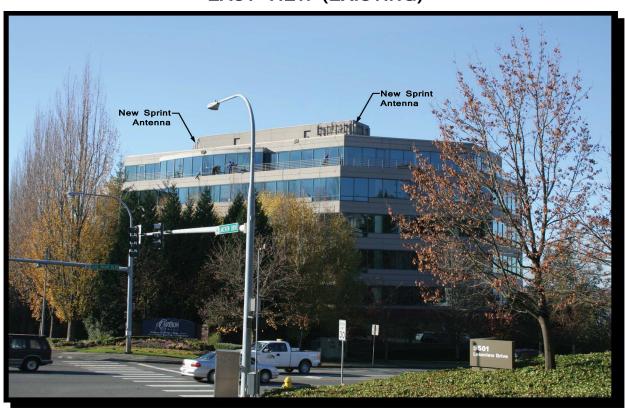
PHONE: 425.670.8651 FAX: 425.712.0846







EAST VIEW (EXISTING)



EAST VIEW (PROPOSED)

KDC

ARCHITECTS.ENGINEERS, P.C. 4720 200TH STREET SW SUITE 200 LYNNWOOD, WA 98036

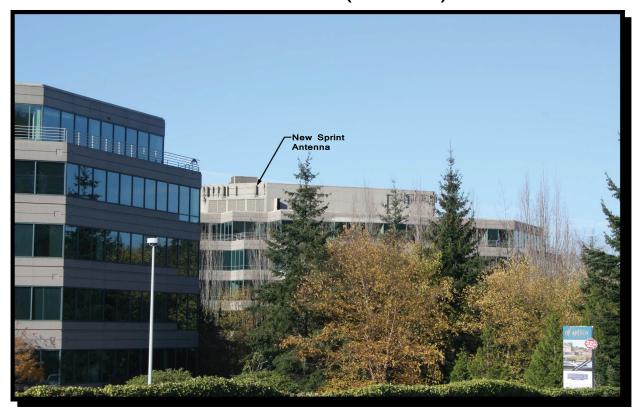
PHONE: 425.670.8651 FAX: 425.712.0846







SOUTH VIEW (EXISTING)



SOUTH VIEW (PROPOSED)

KDC

ARCHITECTS.ENGINEERS, P.C. 4720 200TH STREET SW SUITE 200 LYNNWOOD, WA 98036

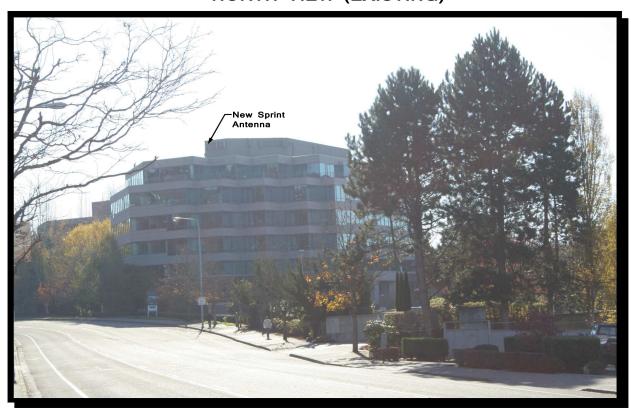
PHONE: 425.670.8651 425.712.0846







NORTH VIEW (EXISTING)



NORTH VIEW (PROPOSED)

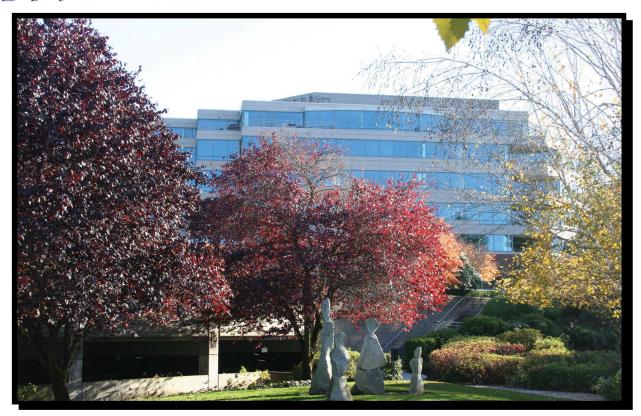
KDC

ARCHITECTS.ENGINEERS, P.C. 4720 200TH STREET SW SUITE 200 LYNNWOOD, WA 98036

PHONE: 425.670.8651 425.712.0846







WEST VIEW (EXISTING)



WEST VIEW (PROPOSED, NO VISIBLE CHANGES)